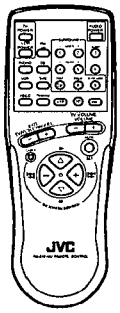
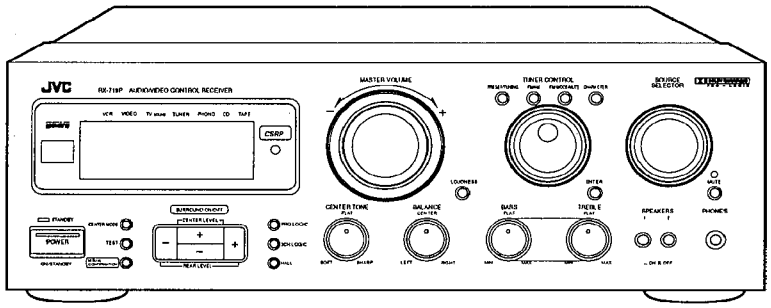
JVC

SERVICE MANUAL

AUDIO/VIDEO CONTROL RECEIVER

RX-718PBK





Area Suffix

UB	Hong Kong
US	Singapore
U	Other Area

COMPU LINK
Remote
Control Component

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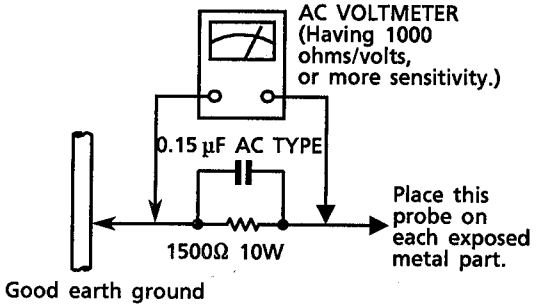
March 1996

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute repalcement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage currnet check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, contorl shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10 W resistor paralleled by a 0.15 µF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor.
     Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

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This mark indicates that you can also use the Menus to do the same operations.
Actual operations using the Menus are explained on pages indicated next to the marks.

The following functions are available only using the Menus.
- Selecting the BACK GROUND COLOR on the TV screen (see page 29)
- Using the AUTO DEMO START to see the demonstration of the Menu operations (see page 29)

Getting Started

Instruction Book

This section explains how to connect stereo components and speakers to the receiver, and how to connect the power supply.

Before Installation

General
- Be sure your hands are dry.
- Turn the power off to all components.
- Read the manuals supplied with the components you are going to connect.

Locations
- Install the receiver in a location that is level and protected from moisture.
- The temperature around the receiver must be between 23° and 104° F (–5° and 40° C).
- Make sure there is good ventilation around the receiver. Poor ventilation could cause overheating and damage the receiver.

Handling the receiver
- Do not insert any metal object into the receiver.
- Do not disassemble the receiver or remove screws, covers, or cabinet.
- Do not expose the receiver to rain or moisture.

Checking the Supplied Accessories

Check to be sure you have all of the following items, which are supplied with the receiver.
The number in the parenthesis indicates the quantity of the pieces supplied.

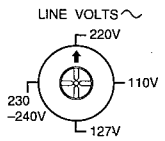
- **Remote Control (1)**
- **Batteries (2)**
- **AM Loop Antenna (1)**
- **FM Wire Antenna (1)**
- **AC Plug Adaptor (1) (Except for Hong Kong)**

If anything is missing, contact your dealer immediately.

Setting the Voltage Selector Switch

Before connections, always do the following first if necessary.

How to set the voltage selector



Set the correct voltage for your area with the voltage selector switch on the rear panel. Use a screw driver to rotate the switch so the number the arrow is pointing at is the same as the voltage where you are plugging in the receiver.

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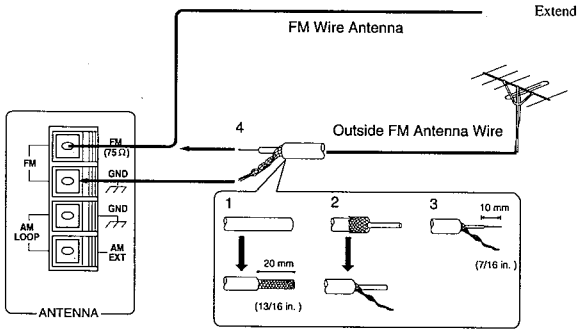
Connecting the FM and AM Antennas

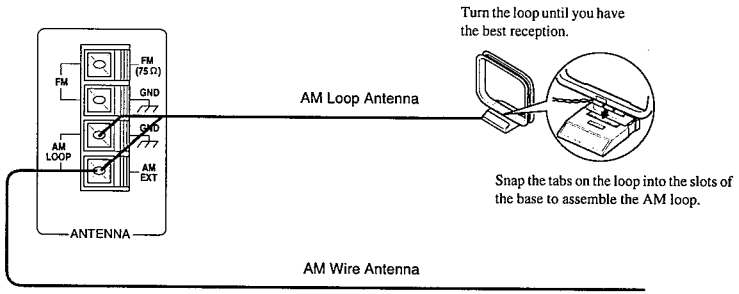
FM Antenna Connections



How to strip the 75-ohm coaxial cable and connect it to the FM terminals

1. Strip back the outside covering of the 75-ohm coaxial cable to expose the braided metallic mesh.
2. Pull the mesh back and twist it into a single connector, as shown in the illustration above.
3. Strip the insulation about 10 mm (7/16 inches) back from the central wire.
4. Insert the twisted mesh and the central wire to the FM terminals, as shown in the illustration above.

AM Antenna Connections

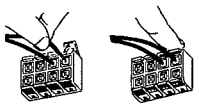

Turn the loop until you have the best reception.
FM (75 Ω)
FM
GND
GND
AM LOOP
AM EXT
ANTENNA
AM Loop Antenna
Snap the tabs on the loop into the slots of the base to assemble the AM loop.
AM Wire Antenna
If reception is poor, connect an outdoor single vinyl-covered wire to the AM EXT terminal. (Keep the AM loop antenna connected.)

Note:
Make sure the antenna conductors do not touch any other terminals, connecting cords and power cord. This could cause poor reception.

Connecting the Speakers

You can connect the following speakers:
- Two sets of front speakers to produce normal stereo sound.
- One set of rear speakers to enjoy the surround effect.
- One center speaker to produce more effective surround effect (to make human voices outstanding).
- One subwoofer speaker to enhance the bass.

For each speaker, connect one end of the speaker signal cable (not supplied) to the speaker terminal on the rear panel and the other end to the speaker. For connecting a subwoofer, see page 5.

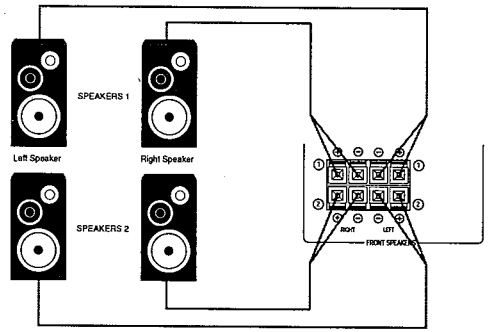


1. **Open each terminal.**
2. **Insert the end of the speaker signal cable as shown (be sure to remove the insulation at the end of each wire first).**
3. **Close the terminals to clamp the speaker signal cables firmly in place.**
4. **Connect the black (–) and red (+) terminals on the rear panel to the black (–) and red (+) terminals marked on the speakers.**

CAUTION:
Use speakers with the same SPEAKER IMPEDANCE indicated by the speaker terminals.

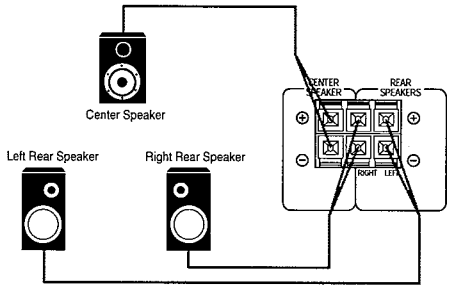
Connecting the front speakers

Connect the front speakers to the FRONT SPEAKERS terminals.



Connecting the rear and center speakers

Connect rear speakers to the REAR SPEAKERS terminals and a center speaker to the CENTER SPEAKER terminals.



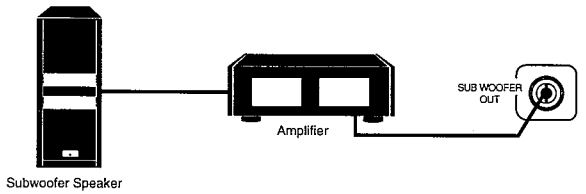
Note:
When you connect rear speakers, make sure that both left and right speakers are connected; otherwise, no sound will come out of the rear speakers.

Enhancing the bass

You can enhance the bass by connecting a subwoofer using a cable with RCA pin plugs.
To connect a subwoofer, you also need a separate power amplifier.

1 **Connect the input jack of the power amplifier to the SUB WOOFER OUT jack on the rear panel.**

2 **Connect a subwoofer speaker to the speaker terminal of the power amplifier.**

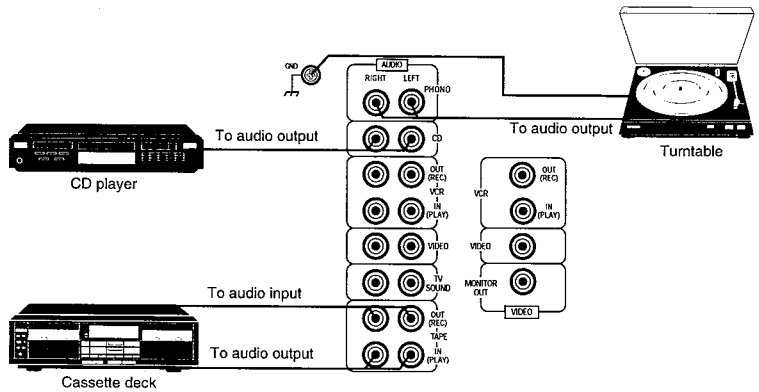


Connecting Audio/Video Components

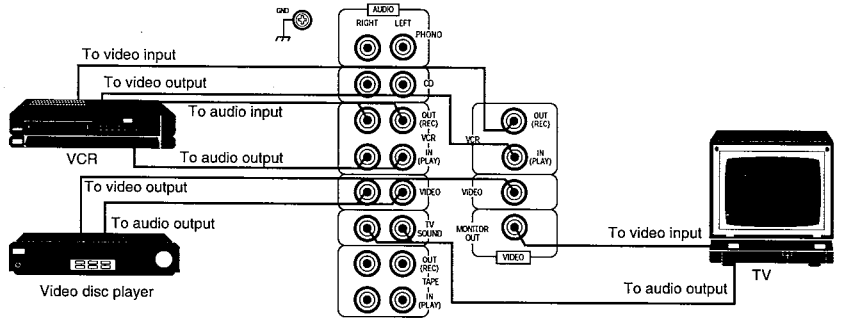
You can connect the other audio/video components to the receiver using cables with RCA pin plugs.

Notes:
- *Both plugs and jacks are color-coded; the red ones are for right audio signals, the white ones for left audio signals, and yellow ones for video signals.*
- *Any turntables incorporating a small-output cartridge such as an MC (moving-coil type) must be connected to this receiver through a commercial head amplifier or step-up transformer. Direct connection may result in insufficient volume.*
- *If a ground cable is provided for your turntable, connect the cable to the screw marked GND on the rear panel.*

Audio component connections



Video component connections



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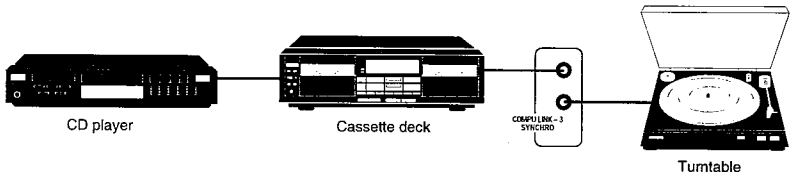
Connecting Audio Components for the COMPU LINK-3 Remote Control System

The COMPU LINK-3 remote control system allows you to control other JVC audio components from the receiver or vice versa. To use this system, connect your JVC audio components and the receiver with the cable (monaural mini-plug) supplied with those components.

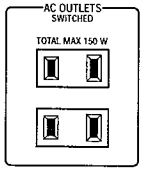
If your audio component has two COMPU LINK-3 SYNCHRO jacks, you can use either one.
If it has only one COMPU LINK-3 SYNCHRO jack, connect it so that it is the last item in the series of components. (For example, the turntable or CD player in the diagram below)

Notes:

- *The COMPU LINK-3 remote control system is the upgraded version of the COMPU LINK-1 and COMPU LINK-2. Even if your component has the COMPU LINK-1 or COMPU LINK-2 jacks, you can still connect it in the COMPU LINK-3 remote control system, but some functions may not work correctly.*
- *For more information about the COMPU LINK-3 (-1 and -2) remote control system, see page 31.*



Power Supply through the Receiver to the Connected Components



If the AC plug of your receiver is of the parallel flat blade type, AC outlets (illustrated to the left) are equipped on the rear of the receiver.
You can use the AC outlets on the rear of the receiver to supply power to audio components.
These AC outlets are "switched" outlets. So when the receiver is off (that is, in standby mode), power is not supplied through these outlets. By turning the receiver on and off, you can turn the connected components on and off at the same time.

Note:
Do not use the AC outlets on the rear of the receiver to supply power to the components in the COMPU LINK remote control system; otherwise, the COMPU LINK remote control system may not work correctly.

CAUTION:
Do not plug the components to the AC outlets on the rear if their total power consumption is greater than indicated by the AC outlets.

Connecting the Power Cord

Before plugging the receiver into an AC outlet, make sure that all connections have been made.
When the power cord is connected, the STANDBY indicator above the POWER button lights up.

Keep the power cord away from the connecting cables for the TV, VCR, and antenna. The power cord may cause noise or screen interference. We recommend that you use a coaxial cable to connect the antenna, since it is well-shielded against interference.

Notes:

- *A small amount of power is always consumed even in standby mode. To switch off the power completely, unplug the power cord from the AC outlet.*
- *If the power cord is unplugged or a power failure occurs, preset settings will be erased in a few days.*
- ***Except for Hong Kong:***
  If the wall outlet does not match the AC plug, use the supplied AC plug adaptor.

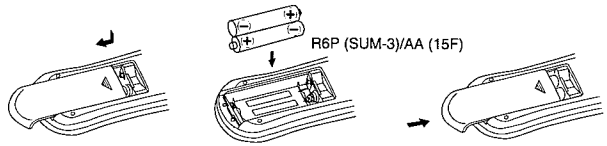
CAUTIONS:

- Do not touch the power cord with wet hands.
- Do not pull on the power cord to unplug the unit. When unplugging the unit, always grasp the plug itself so as not to damage the cord.

Putting Batteries in the Remote Control

Before using the remote control, put two supplied batteries first. When using the remote control, aim the remote control directly at the remote sensor on the receiver.

1. **On the back of the remote control, press down on the battery cover and slide it out.**
2. **Insert batteries. Make sure to observe the proper polarity: (+) to (+) and (–) to (–).**
3. **Slide the cover in.**



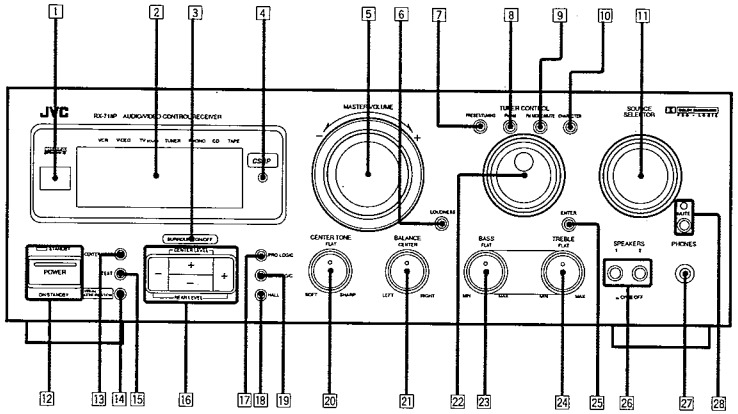
If the range or effectiveness of the remote control decreases, replace the batteries. Use two R6P (SUM-3)/AA (15F) type dry-cell batteries.

CAUTIONS:
Follow these precautions to avoid leaking or cracking cells:

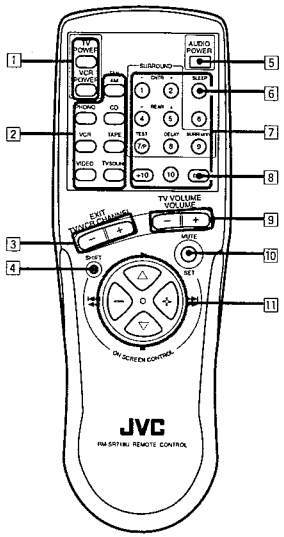
- Place batteries in the remote control so they match the polarity indicated: (+) to (+) and (–) to (–).
- Use the correct type of batteries. Batteries that look similar may differ in voltage.
- Always replace both batteries at the same time.
- Do not expose batteries to heat or flame.

Parts Identification

Become familiar with the buttons and controls on your receiver before use.



Refer to the pages in parentheses for details.



Front Panel

1. Remote sensor
2. Display (10)
3. SURROUND ON/OFF button (18, 20)
4. CSRP button (23)
5. MASTER VOLUME control (11)
6. LOUDNESS button (12)
7. PRESET/TUNING button (13, 15)
8. FM/AM button (13)
9. FM MODE/MUTE button (15)
10. CHARACTER button (16)
11. SOURCE SELECTOR (10)
12. POWER button and STANDBY indicator (10)
13. CENTER MODE button (20)
14. VISUAL CONFIRMATION button (24)
15. TEST button (21)
16. Cursor buttons (+/–) for surround adjustment (21)
17. PRO LOGIC button (20)
18. HALL button (18)
19. 3CH LOGIC button (20)
20. CENTER TONE control (22)
21. BALANCE control (11)
22. TUNER CONTROL (13, 16)
23. BASS control (11)
24. TREBLE control (11)
25. ENTER button (14, 16)
26. SPEAKERS 1/2 buttons (11)
27. PHONES jack (12)
28. MUTE button and indicator (12)

Remote Control

1. TV POWER and VCR POWER buttons (30)
2. Source selecting buttons (10)
3. TV/VCR CHANNEL buttons (+/–) (30)
   * EXIT button (25)
4. SHIFT button (18, 20, 23, 25, 30)
5. AUDIO POWER button (10)
6. * SLEEP button (23)
7. 10 keys (14, 30)
   * Surround adjustment buttons (18, 20)
8. DISC button (30)
9. VOLUME buttons (+/–) (11)
   * TV VOLUME buttons (30)
10. MUTE button (12)
    * SET button (25)
11. Operating buttons for JVC audio/video components (30)
    * Cursor buttons for menu operation (25)

** Some buttons on the remote control have been assigned more than one function. To have the buttons function as marked in green, press the SHIFT button at the same time.*

Basic Operations

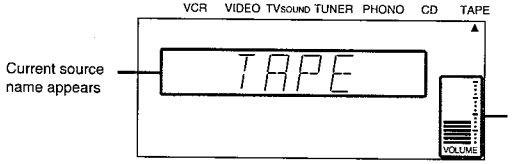
The following operations are commonly used when you play any sound source.

Turning the Power On and Off

On the front panel

From the remote control

To turn on the power, press the POWER button on the front panel or the AUDIO POWER button on the remote control.
The STANDBY indicator turns off. The name of the current source appears on the display.


VCR VIDEO TVSOUND TUNER PHONO CD TAPE
Current source name appears
TAPE
VOLUME
Volume level is also shown here whenever the power is on.

To turn off the power, press the POWER button or the AUDIO POWER button again.
The STANDBY indicator turns on.

See also page 25.

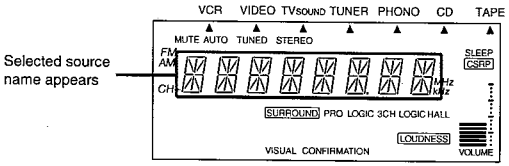
Selecting the Source to Play

You need to select the source to listen before you start playing any source.

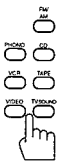
On the front panel

On the front panel:

Turn the SOURCE SELECTOR so that the desired source name appears on the display (at the same time the arrow (▲) on the display points the source).



VCR	View the video component connected to the VCR jacks.
VIDEO	View the video component connected to the VIDEO jacks.
TV SOUND	Listen to TV broadcasts.
TUNER	Listen to FM or AM broadcasts.
PHONO	Listen to records.
CD	Listen to CDs.
TAPE	Listen to cassette tapes.



From the remote control

From the remote control:

Press the desired source selecting buttons.

VCR	View the video component connected to the VCR jacks.
VIDEO	View the video component connected to the VIDEO jacks.
TV SOUND	Listen to TV broadcasts.
FM/AM*	Listen to FM or AM broadcasts.
PHONO*	Listen to records.
CD*	Listen to CDs.
TAPE*	Listen to cassette tapes.

Note:
When you press one of the source selecting buttons marked above with an asterisk (*), the receiver automatically turns on.

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Selecting the Front Speakers

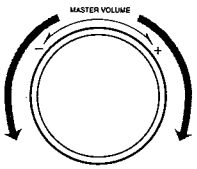
When you have connected two sets of the front speakers, you can select which to use. Pressing in the SPEAKERS 1 or SPEAKERS 2 button on the front panel activates the respective set of the speakers.

To use the speakers connected to the FRONT SPEAKERS ① terminals, press in the SPEAKERS 1 button (▂ON), and press out the SPEAKERS 2 button (▉OFF).
To use the speakers connected to the FRONT SPEAKERS ② terminals, press in the SPEAKERS 2 button (▂ON), and press out the SPEAKERS 1 button (▉OFF).
To use both sets of the speakers, press in both the SPEAKERS 1 and 2 buttons (▂ON).
To use neither set of the speakers, press out both the SPEAKERS 1 and 2 buttons (▉OFF).

Note:
When only one set of the speakers is connected to either the FRONT SPEAKERS ① or ② terminals, do not press in both SPEAKERS 1 and 2 buttons (▂ON). If you do, no sound comes out of the front speakers.

See also page 25.

Adjusting the Volume



On the front panel

From the remote control

When you turn on the power or change the volume level, the volume level is shown on the display.

On the front panel:

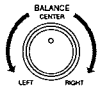
To increase the volume, turn the MASTER VOLUME control clockwise.
To decrease the volume, turn it counterclockwise.

From the remote control:

To increase the volume, press the VOLUME + button.
To decrease the volume, press the VOLUME – button.

CAUTION:
Always set the volume level to the minimum before starting any source. If the volume level is left turned up, the sudden blast of sound energy can permanently damage your hearing and/or ruin your speakers.

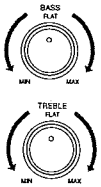
Adjusting the Front Speaker Output Balance



If the sounds you hear from the right and left front speakers are unequal, you can adjust the speaker output balance with the BALANCE control on the front panel.

To decrease the left channel sound, turn the BALANCE control clockwise.
To decrease the right channel sound, turn the BALANCE control counterclockwise.

Adjusting the Tone



You can increase or decrease the amount of the bass and the treble reinforcement using the BASS and TREBLE controls on the front panel.
Usually set these controls at the FLAT position.

To increase the bass reinforcement, turn the BASS control clockwise.
To decrease the bass reinforcement, turn the BASS control counterclockwise.

To increase the treble reinforcement, turn the TREBLE control clockwise.
To decrease the treble reinforcement, turn the TREBLE control counterclockwise.

Listening at Low Volume (Loudness)

Human ears are not sensitive to bass at low volume. To compensate for this, the loudness function automatically boosts the bass level as you lower the volume.

To use the loudness function, press the LOUDNESS button on the front panel.
The LOUDNESS indicator lights up on the display.

To turn the function off, press the LOUDNESS button again.
The LOUDNESS indicator goes off.

Muting the Sound

On the front panel

From the remote control

You can easily turn off the volume by pressing the MUTE button.

To mute the sound through all speakers and headphones connected
Press the MUTE button so that the indicator on the front panel turns on. ("MUTE" also appears on the display.)

To cancel the mute, press the MUTE button again so that the indicator turns off.
When you turn the MASTER VOLUME control or press the VOLUME +/– button, mute is also canceled.

Listening with Headphones

A standard pair of headphones can be connected to the PHONES jack on the front panel. **Be sure to turn down the volume before connecting or putting on headphones, as high volume can damage both the headphones and your hearing.**

To listen with only headphones
Press out both the SPEAKERS 1 and 2 buttons (▉OFF).

Recording a Source

You can record any source playing through the receiver to the cassette deck connected to the TAPE jacks, and the VCR connected to the VCR jacks at the same time.
While recording, you can listen to the selected sound source at whatever sound level you like, without affecting the sound levels of the recording.

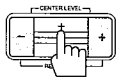
Note:
The output volume level, tone adjustments, and surround modes will not affect the recording.

Receiving Radio Broadcasts

You can browse through all the stations or use the preset function to go immediately to a particular station.

Setting the AM Tuner Interval Spacing

Some countries space AM stations 9 kHz apart, and other countries use 10 kHz spacing.



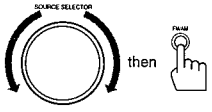
When shipped, the spacing is set to 9 kHz.

To select the 10 kHz interval, be sure the receiver is turned off, but is plugged into an AC outlet. Hold down the upper cursor button (+) and press the POWER button (both buttons on the front panel). "10K STEP" appears on the display for about three seconds. Now the 10 kHz interval is selected.

To change back to the 9 kHz interval, be sure the receiver is turned off, but is plugged into an AC outlet. Hold down the lower cursor button (–) and press the POWER button (both buttons on the front panel). "9K STEP" appears on the display for about three seconds. Now the 9 kHz interval is selected.

See also page 26.

Tuning in Stations Manually



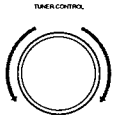
On the front panel

From the remote control

1. **Select TUNER as the source to play and choose the band.**
   On the front panel:
   1 Turn the SOURCE SELECTOR to select TUNER.
   The last received station is tuned in.
   2 Press the FM/AM button.
   Each time you press the button, the band (FM and AM) alternates.
   From the remote control:
   Press the FM/AM button.
   The last received station is tuned in.
   Each time you press the button, the band (FM and AM) alternates.

   Note:
   If you do not see a preset channel number on the display, the receiver is already in the manual tuning mode, so skip Step 2 below.

2. **Press the PRESET/TUNING button on the front panel to set the tuning mode to the manual tuning.**
   When the manual tuning is selected, the preset channel number disappears from the display.
   Each time you press the button, the manual tuning and preset tuning modes alternate.



3. **Turn the TUNER CONTROL on the front panel clockwise or counterclockwise.**
   Turning it clockwise increases the frequency.
   Turning it counterclockwise decreases the frequency.

Notes:
- *When you turn the TUNER CONTROL fast, the frequency keeps changing until you turn the TUNER CONTROL again or a station is tuned in.*
- *When a station of sufficient signal strength is tuned in, the TUNED indicator lights up on the display. When an FM stereo program is received, the STEREO indicator also lights up.*

See also page 26.

Using the Preset Tuning

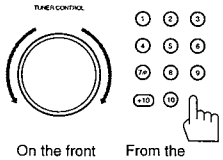
Once a station is assigned to a channel number, the station can be quickly tuned. You can preset up to 40 stations, either AM, FM, or a mixture of both, at random.

Storing stations into memory

You can preset the stations you want into memory by following the presetting method below.

1. **Tune in the station you want to preset (see above).**

2. **Press the ENTER button on the front panel.**
   "CH- – –" appears on the display for 5 seconds.



On the front panel | From the remote control

3. **Select a channel number within the 5 seconds.**
   On the front panel:
   Turn the TUNER CONTROL.
   From the remote control:
   Press the 10 keys to select a channel number.
   Examples: For channel number 5, press 5. For channel number 15, press +10 then 5.
   For channel number 20, press +10 then 10.

   Note:
   When you use the remote control, be sure that the remote control is activated for tuner, not for the CD and others. (See page 30.)

4. **Press the ENTER button again while the selected channel number is flashing on the display.**
   The selected channel number stops flashing, and the station is assigned to the selected channel number.

To erase a stored station
Storing a new station on a used number erases the previously stored one.

CAUTION:
Preset stations may be erased when power is cut off to the receiver, as when it is unplugged from the AC outlet or a power failure occurs. If the preset stations are lost, simply store the stations again using the above procedure.

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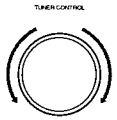
Tuning in a preset station



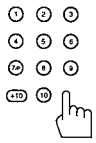
On the front panel:

1. **Turn the SOURCE SELECTOR to select TUNER.**
   The last received station is tuned in.

   Note:
   If you see a preset channel number on the display, the receiver is already in the preset tuning mode, so skip Step 2 below.

2. **Press the PRESET/TUNING button to set the tuning mode to the preset tuning.**
   When the preset tuning is selected, a preset channel number appears on the display.
   Each time you press the button, the manual tuning and preset tuning modes alternate.

3. **Turn the TUNER CONTROL to select a preset channel number.**
   Turning it clockwise changes preset channels in increasing order.
   Turning it counterclockwise changes preset channels in decreasing order.



From the remote control:

1. **Press the FM/AM button.**
   The last received station is tuned in.

2. **Press the 10 keys to select a preset channel number.**
   Examples: For channel number 5, press 5. For channel number 15, press +10 then 5.
   For channel number 20, press +10 then 10.

   Note:
   When you use the remote control, be sure that the remote control is activated for tuner, not for the CD and others. (See page 30.)

Selecting the FM Reception Mode

You can change the FM reception mode so that reception will be improved.

When an FM stereo broadcast is hard to receive or noisy
Press the FM MODE/MUTE button on the front panel. The MUTE AUTO indicator goes off on the display. Reception will be improved although you will lose the stereo effect. In this mode, you will hear noise while tuning into the stations.

To restore stereo effect
Press the FM MODE/MUTE button again so that the MUTE AUTO indicator lights up on the display. In this mode, when a program is broadcast in stereo, you will hear stereo sound; when in monaural, you will hear monaural sounds. This mode is also useful to suppress static noise between stations.

See also page 27.

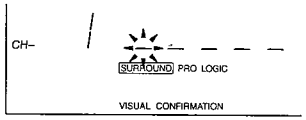
Assigning Names to Preset Stations

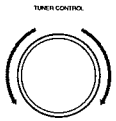
You can assign a name of up to five characters to each preset station (from channel number 1 to 20). When a preset station is tuned in, its assigned name will appear on the display.

On the front panel *only*:

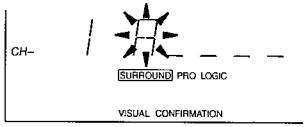
1. **Tune in a preset station (channel number 1 to 20).**
   See page 15 for details.

2. **Press the CHARACTER button on the front panel.**
   The first character position starts flashing.

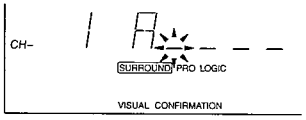




3. **Turn the TUNER CONTROL to select the first character.**
   You can use characters listed below.



4. **When the character you want appears, press the CHARACTER button.**
   The next character position starts flashing.

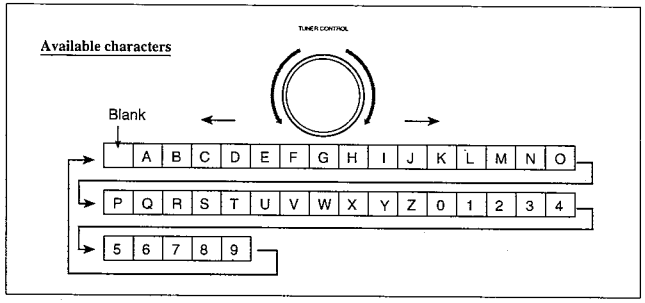


5. **Repeat Steps 3 and 4 to enter up to five characters.**

6. **Press the ENTER button after you have assigned a name.**

To erase the input characters
Insert blanks using the same procedure described above.
When using the Menus, you can erase them more easily. (See page 27.)

Available characters

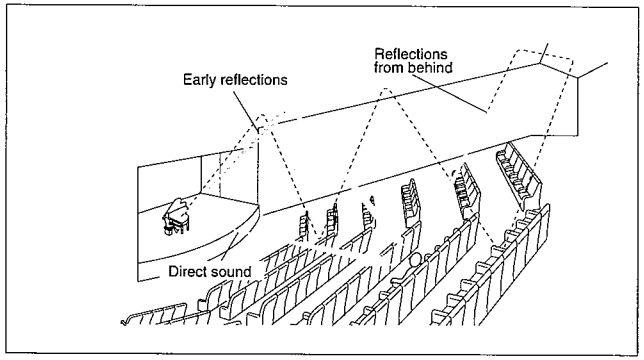


The built-in surround processor provides three types of surround modes — Dolby Pro Logic and Dolby 3-Channel Logic and JVC's Hall Surround.

Notes:
- *The surround processor has no effect on monaural sources.*
- *The surround processor cannot be used for recording.*

What can the surround processor do?

The sound heard in a concert hall or a movie theater consists of direct sound and indirect sound: early reflections and reflections from behind. The reflected sounds are always delayed by the distances of the ceiling and walls from the listener. The early reflections are some of the most important elements of the acoustic surround. So, what the surround processor does is to reproduce these elements in your listening room.



On Dolby Surround

The Dolby Surround has been developed to reproduce the important elements of the acoustic surround at home.

To watch the soundtracks of video software bearing the mark DOLBY SURROUND *which includes the same encoded surround information as found in Dolby Stereo films, the receiver can provide you with 2 Dolby Surround modes (Dolby Pro Logic and Dolby 3ch Logic).

Dolby Pro Logic: Select this mode when optional rear speakers are connected.

Dolby 3ch Logic: Select this mode when a center speaker is connected without rear speakers.

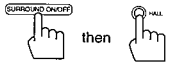
On JVC's Hall Surround

In order to reproduce a more realistic sound field in your listening room while playing an ordinary stereo source, JVC's Hall Surround has been designed to give you clearer vocals and to create the feeling of a concert hall. The sound is reproduced through the front speakers and rear speakers.

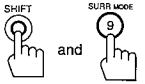
** Manufactured under license from Dolby Laboratories Licensing Corporation.*
DOLBY, the double-D symbol and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

MENU See also pages 27 to 28.

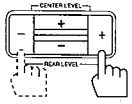
You need to connect one set of rear speakers to obtain the full effect.



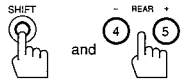
On the front panel



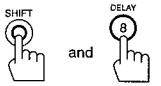
From the remote control



On the front panel



From the remote control



From the remote control

1. **Set the surround mode on, then select the Hall Surround.**

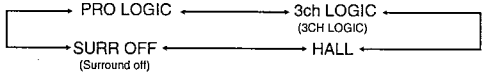
On the front panel:

[1] Press the SURROUND ON/OFF button so that the SURROUND indicator and one of the surround mode indicators (PRO LOGIC, 3CH LOGIC, or HALL) light up on the display.

[2] Press the HALL button.
"HALL" appears on the display. (The HALL indicator also lights up.)

From the remote control:

Press the SURR MODE button repeatedly, while pressing the SHIFT button, until "HALL" appears on the display.
The HALL indicator also lights up.



2. **Set the output levels of the rear speakers.**

On the front panel:

Press the left or right cursor button (REAR LEVEL +/–) repeatedly.

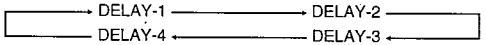
From the remote control:

Press the REAR +/– button repeatedly while pressing the SHIFT button.

3. **Set the delay time of the delayed sound.**

From the remote control:

Press the DELAY button while pressing the SHIFT button.
Each time you press the button, the delay time changes among 4 levels.



DELAY-1: When your distance to your rear speakers is greater than that to the front speakers.
DELAY-2: When your distance to your rear speakers is almost equal to that to the front speakers.
DELAY-3: When your distance to your rear speakers is less than that to the front speakers.
DELAY-4: When your distance to your rear speakers is much less than that to the front speakers.

Notes:
- *You can adjust the sound level in 1 dB step within the range of ±10 dB. The sound levels of the left and right rear speakers will be the same.*
- *The sound level of the rear speakers can be only stored for the Hall Surround.*

To cancel the Hall Surround, press the SURROUND ON/OFF button again.
When using the remote control, press the SURR MODE button repeatedly, while pressing the SHIFT button, until the "SURR OFF" appears on the display.

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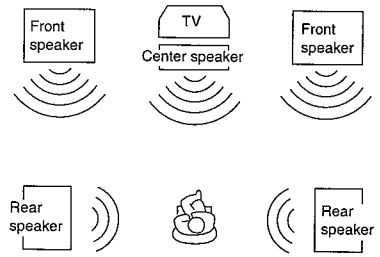
Arranging the Speakers for Dolby Surround

The following illustrations show how to obtain the optimum sound environment for various Dolby Surround settings. Try to find the speaker direction and location to create the optimum sound field.

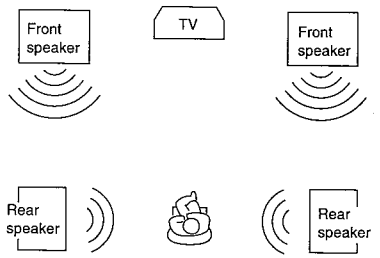
When you have added a center speaker and rear speakers



In this case:
1. Select PRO LOGIC.
2. Select NORMAL or WIDE for center mode.

See pages 20 to 22 for more details.

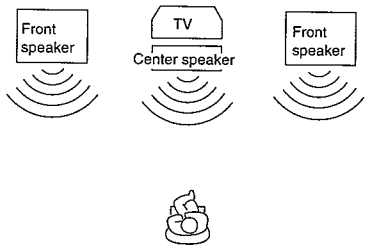
When you have added rear speakers



In this case:
1. Select PRO LOGIC.
2. Select PHANTOM for center mode.

See pages 20 to 22 for more details.

When you have added a center speaker (without rear speakers)



In this case:
1. Select 3CH LOGIC.
2. Select NORMAL or WIDE for center mode.

See pages 20 to 22 for more details.

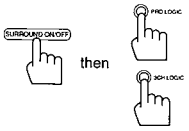
Preparing for Dolby Surround

MENU See also pages 27 to 28.

The receiver memorizes Dolby Surround adjustments.

1. Set the surround mode on, then select either PRO LOGIC or 3CH LOGIC.

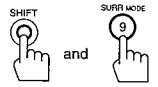
On the front panel:



On the front panel

1 Press the SURROUND ON/OFF button so that the SURROUND indicator and one of the surround mode indicators (PRO LOGIC, 3CH LOGIC, or HALL) light up on the display.
2 Press either the PRO LOGIC or 3CH LOGIC button.
"PRO LOGIC" or "3ch LOGIC" appears on the display. The corresponding indicator also lights up.

From the remote control:



From the remote control

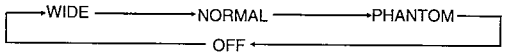
Press the SURR MODE button repeatedly, while pressing the SHIFT button, until "PRO LOGIC" or "3ch LOGIC" appears on the display.
The corresponding indicator also lights up.

PRO LOGIC: Use this mode to watch a video tape with Dolby Surround when you have connected the rear speakers.
3CH LOGIC: Use this mode to watch a video tape with Dolby Surround when you have connected a center speaker and no rear speakers.
HALL: This is JVC's original surround program, and different from Dolby Surround. To use this, see page 18.

2. Set the center mode.

On the front panel:

Press the CENTER MODE button.
Each time you press the CENTER MODE button, the mode changes as follows.

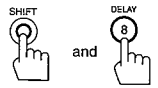


WIDE: Select this mode when the size of the center speaker is the same as that of the front speakers.
NORMAL: Select this mode when the size of the center speaker is smaller than that of the front speakers.
PHANTOM: Select this mode when you have not connected a center speaker.
OFF: Select this mode to shut off the output of the center channel signal.

Note:
When you have selected 3CH LOGIC in Step 1 above, you cannot select PHANTOM.

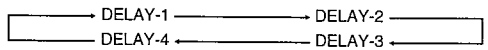
3. Set the delay time of the delayed sound.

From the remote control:



From the remote control

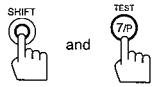
Press the DELAY button.
Each time you press the button, the delay time changes among 4 levels.



DELAY-1: When your distance to your rear speakers is greater than that to the front speakers.
DELAY-2: When your distance to your rear speakers is almost equal to that to the front speakers.
DELAY-3: When your distance to your rear speakers is a little less than that to the front speakers.
DELAY-4: When your distance to your rear speakers is much less than that to the front speakers.

Note:
When you have selected 3CH LOGIC in Step 1 above, you cannot adjust the delay time.

On the front panel



From the remote control

4. Start checking speaker output balance.

On the front panel:

Press the TEST button.

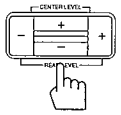
From the remote control:

Press the TEST button while pressing the SHIFT button.
When you press the button, "TEST" starts flashing on the display and a test tone comes out of speakers in the following order:

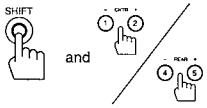
Left front speaker → Center speaker → Right front speaker → Rear speakers → Left front speaker

Notes:

- *No test tone comes out of the rear speakers when you have selected 3CH LOGIC.*
- *No test tone comes out of the center speaker when you select PHANTOM or OFF for the center mode.*



On the front panel



From the remote control

5. Set the output levels of the center and the rear speakers.

On the front panel:

Press the upper or lower cursor button (CENTER LEVEL +/–) repeatedly to set the sound level of the center speaker.
Press the left or right cursor button (REAR LEVEL +/–) repeatedly to set the sound level of the rear speakers.

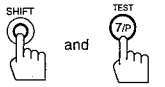
From the remote control:

Press the CNTR +/– button, while pressing the SHIFT button, to set the sound level of the center speaker.
Press the REAR +/ – button, while pressing the SHIFT button, to set the sound level of the rear speakers.

Notes:

- *You can adjust these levels in 1 dB step within the range of ±10 dB. The sound levels of the left and right rear speakers will be the same.*
- *You cannot set the sound level of the rear speakers when you have selected 3CH LOGIC.*
- *You cannot set the sound level of the center speaker when you select PHANTOM or OFF for the center mode.*

On the front panel



From the remote control

6. Finish checking speaker output balance.

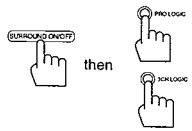
On the front panel:

Press the TEST button again.

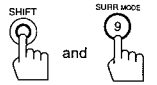
From the remote control:

Press the TEST button again while pressing the SHIFT button.
The test tone stops.

Enjoying Dolby Surround



On the front panel



From the remote control

Once you have set Dolby Surround adjustments, you can use the same adjustments every time you want to enjoy Dolby Surround.

1. Set the surround mode on, then select either PRO LOGIC or 3CH LOGIC.

On the front panel:

1. Press the SURROUND ON/OFF button so that the SURROUND indicator and one of the surround mode indicators (PRO LOGIC, 3CH LOGIC, or HALL) light up on the display.
2. Press either the PRO LOGIC or 3CH LOGIC button.
   "PRO LOGIC" or "3ch LOGIC" appears on the display. The corresponding indicator also lights up.

From the remote control:

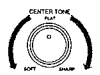
Press the SURR MODE button repeatedly, while pressing the SHIFT button, until "PRO LOGIC" or "3ch LOGIC" appears on the display.
The corresponding indicator also lights up.

PRO LOGIC ↔ 3ch LOGIC (3CH LOGIC)
SURR OFF (Surround off) ↔ HALL

2. Play a sound source which was processed with Dolby Surround and is labeled with DOLBY SURROUND mark.

To cancel Dolby Surround, press the SURROUND ON/OFF button again.
When using the remote control, press the SURR MODE button repeatedly, while pressing the SHIFT button, until the "SURR OFF" appears on the display.

Making dialogues in movies softer or clearer



By using the CENTER TONE control you can adjust the level of mid-frequency range, which the human voice is mostly made up of.

To make dialogues clearer, turn the control toward SHARP.
To make them softer, turn the control toward SOFT.
When set to the FLAT position, no adjustment is applied.

Note:
The CENTER TONE control cannot be used when sounds do not come out of the center speaker.

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Other Features

The receiver has some other features like the CSRP function, the Sleep Timer and the Visual Confirmation. By using these useful features your audio/video life will be much improved.

Using the CSRP Function

The optimum sound settings differ for each playing source. So, you have to change settings each time you select a different source.
The JVC's CSRP (COMPU LINK Source-Related Preset) function is used to assign and store different sound settings for each different playing source. By using this function, you don't have to change the settings every time you change the source. The stored settings for the newly selected source are automatically recalled.

The following can be stored for each source:
- Volume level (see page 11)
- Loudness (see page 12)
- Surround settings (see pages 17 to 22)

Note:
If the source is FM or AM, the CSRP function works only when one of the preset channels from 1 — 20 is tuned in. You can assign a different setting for each preset channel.

To store the sound settings by using the CSRP function
1. **Press the CSRP button on the front panel.**
   The CSRP indicator lights up on the display.

2. **Select the sound effects listed above while the CSRP indicator is lit on the display.**

To recall the sound settings
Whenever the CSRP indicator is lit on the display, the settings for the currently selected source is always recalled.

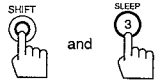
To cancel the CSRP function, press the CSRP button so that the CSRP indicator goes off from the display. (Even though the CSRP function is canceled, recalled sound effects remains active.)

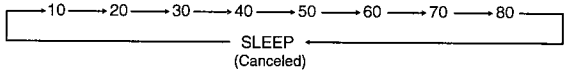
See also page 28.

Using the Sleep Timer

Using the Sleep Timer, you can fall asleep to music and know the receiver will turn off by itself rather than play all night.

To set the Sleep Timer
Press the SLEEP button on the remote control repeatedly while pressing the SHIFT button.
The SLEEP indicator lights up and the shut-off time appears on the display.
Each time you press the button, the shut-off time on the display changes as shown below:





The receiver will turn off after the time you have set.

To check or change the time remaining until the shut-off time
Press the SLEEP button once while pressing the SHIFT button. The remaining time is displayed in minutes.
If you press the button repeatedly, you can change the shut-off time.

To cancel the Sleep Timer
Press the SLEEP button repeatedly, while pressing the SHIFT button until the SLEEP indicator goes off.

Using the Visual Confirmation

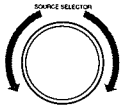
See also page 28.

When you press a certain button or turn a control knob on the front panel, you can see what you are doing on the TV screen.
To use this function, you need to connect the TV to the MONITOR OUT jack on the rear panel (see page 6), and set the TV's input mode to the proper position to which the receiver is connected.
When the TV's input mode is for TV, you cannot see the on-screen display.

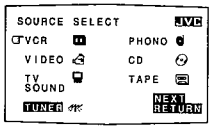
To activate the Visual Confirmation
Press the VISUAL CONFIRMATION button on the front panel so that the VISUAL CONFIRMATION indicator lights up on the display.

EXAMPLES:

When you turn the SOURCE SELECTOR:

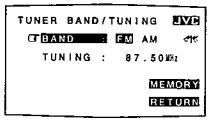


The SOURCE SELECT Menu appears for a while.

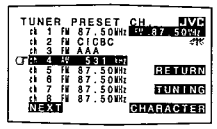


When you press the FM/AM button:

If the tuning mode is "manual":
The TUNER BAND/TUNING Menu appears for a while.



If the tuning mode is "preset":
The TUNER PRESET CH. Menu appears for a while.

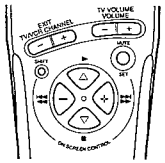


To cancel the Visual Confirmation
Press the VISUAL CONFIRMATION button again so that the VISUAL CONFIRMATION indicator goes off.

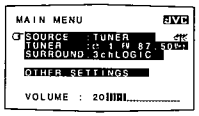
Using the On-Screen Display to Control the Receiver

You can use the Menus on the TV screen to control the Unit. Before using the Menus, be sure that you have connected the TV correctly (page 6). This is possible only using the remote control.

Basic Procedures



1. **Press and hold the SHIFT button until you finish the following procedures.**
2. **Press the SET button or the cursor buttons (△, ▽, +, –).**
   The MAIN MENU appears on the TV screen.



3. **Press the cursor buttons (△, ▽) to move ☞ to the Sub-Menu you want to set, then press the SET button.**
   The Sub-Menu you want appears.
4. **Press the cursor buttons (△, ▽, +, –) to move ☞ to the item you want to set.**
   △, ▽: Move ☞ up and down.
   +, –: Move ☞ to the left and right.
5. **Press the cursor buttons (+, –) to change the setting for the selected item.**
6. **When you finish, press the EXIT button.**
   The Menu disappear from the TV screen.

To go back to the MAIN MENU (or previous Menus) any time while using the Menus
Press the cursor buttons (△, ▽, +, –) to move ☞ to RETURN, then press the SET button.

To go to the next screens
Press the cursor buttons (△, ▽, +, –) to move ☞ to NEXT, then press the SET button.

Adjusting the volume (see also page 11)

1. **Press and hold the SHIFT button until you finish the following procedures.**
2. **Press the SET button or the cursor buttons (△, ▽, +, –).**
   The MAIN MENU appears on the TV screen.

On-Screen 1

3. **Press the cursor buttons (△, ▽) to move ☞ to "VOLUME".**
   See On-Screen 1.
4. **Press the cursor buttons (+, –) to adjust the volume.**
5. **When you finish, press the EXIT button.**
   The Menu disappears from the TV screen.

Selecting the source (see also page 10)

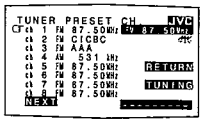
1. **Press and hold the SHIFT button until you finish the following procedures.**
2. **Press the SET button or the cursor buttons (△, ▽, +, –).**
   The MAIN MENU appears on the TV screen.

On-Screen 2

3. **Press the SET button.**
   The SOURCE SELECT Menu (see On-Screen 2) appears.
4. **Press the cursor buttons (△, ▽, +, –) to move ☞ to the source you want to play, then press the SET button.**
5. **When you finish, press the EXIT button.**
   The Menu disappears from the TV screen.

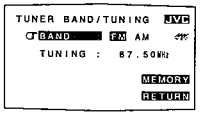
Tuning into stations and storing into memory (see also pages 13 and 14)

1. **Press and hold the SHIFT button until you finish the following procedures.**
2. **Press the SET button or the cursor buttons (△, ▽, +, –).**
   The MAIN MENU appears on the TV screen.



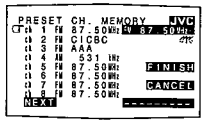
On-Screen 3

3. **Press the cursor buttons (△, ▽) to move ☞ to "TUNER", then press the SET button.**
   The TUNER PRESET CH. Menu (see On-Screen 3) appears.

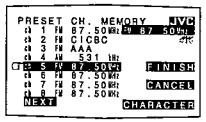


On-Screen 4

4. **Press the cursor buttons (△, ▽, +, –) to move ☞ to "TUNING", then press the SET button.**
   The TUNER BAND/TUNING Menu (see On-Screen 4) appears.
5. **Press the cursor buttons (+, –) to select either "FM" or "AM".**
6. **Press the cursor buttons (△, ▽) to move ☞ to "TUNING".**
7. **Press the cursor buttons (+, –) to tune in the stations.**
8. **Press the cursor buttons (△, ▽) to move ☞ to "MEMORY", then press the SET button.**
   The PRESET CH. MEMORY Menu (see On-Screen 5) appears.



On-Screen 5



On-Screen 6

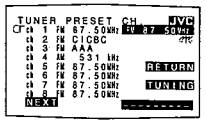
9. **Press the cursor buttons (△, ▽) to move ☞ to select a preset channel number, then press the SET button.**
   See On-Screen 6.

   To go to the next screens, move ☞ to "NEXT", then press the SET button.
10. **Press the cursor buttons (△, ▽, +, –) to move ☞ to "FINISH", then press the SET button.**
    The TUNER BAND/TUNING Menu appears again.

    To cancel presetting the station, move ☞ to "CANCEL", then press the SET button.
11. **Repeat steps 5 to 10 until you preset all stations you want.**
12. **When you finish, press the EXIT button.**
    The Menu disappears from the TV screen.

Tuning in a preset station (see also page 15)

1. **Press and hold the SHIFT button until you finish the following procedures.**
2. **Press the SET button or the cursor buttons (△, ▽, +, –).**
   The MAIN MENU appears on the TV screen.



On-Screen 7

3. **Press the cursor buttons (△, ▽) to move ☞ to "TUNER", then press the SET button.**
   The TUNER PRESET CH. Menu (see On-Screen 7) appears.
4. **Press the cursor buttons (△, ▽) to move ☞ to the preset station you want, then press the SET button.**

   To go to the next screens, move ☞ to "NEXT", then press the SET button.
5. **When you finish, press the EXIT button.**
   The Menu disappears from the TV screen.

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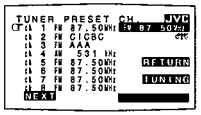
Assigning names to the preset stations (see also page 16)

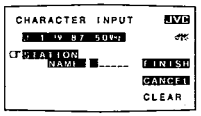
1. **Press and hold the SHIFT button until you finish the following procedures.**
2. **Press the SET button or the cursor buttons (△, ▽, +, –).**
   The MAIN MENU appears on the TV screen.
3. **Press the cursor buttons (△, ▽) to move ☞ to "TUNER", then press the SET button.**
   The TUNER PRESET CH. Menu (see On-Screen 8) appears.



On-Screen 8

4. **Press the cursor buttons (△, ▽) to move ☞ to a preset station you want, then press the SET button.**

   To go to the next screens, move ☞ to "NEXT", then press the SET button.



On-Screen 9

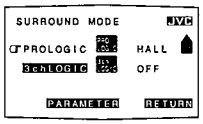
5. **Press the cursor buttons (△, ▽) to move ☞ to "CHARACTER", then press the SET button.**
   The CHARACTER INPUT Menu (see On-Screen 9) appears.
6. **Press the cursor buttons (△, ▽, +, –) to assign a name to the preset channel.**
   △, ▽: Selects the characters.
   +, –: Move the character input position to the left or right.

   To erase the name, move ☞ to "CLEAR", then press the SET button.
7. **Press the cursor button (+) to move ☞ to "FINISH", then press the SET button.**
   The TUNER PRESET CH. Menu appears again.

   To cancel the assignment, move ☞ to "CANCEL", then press the SET button.
8. **Repeat steps 4 to 7 until you assign names to other preset stations you want.**
9. **When you finish, press the EXIT button.**
   The Menu disappears from the TV screen.

Selecting the surround modes (see also pages 17 to 22)

1. **Press and hold the SHIFT button until you finish the following procedures.**
2. **Press the SET button or the cursor buttons (△, ▽, +, –).**
   The MAIN MENU appears on the TV screen.
3. **Press the cursor buttons (△, ▽) to move ☞ to "SURROUND", then press the SET button.**
   The SURROUND MODE Menu (see On-Screen 10) appears.



On-Screen 10

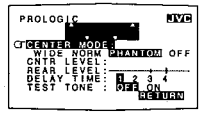
4. **Press the cursor buttons (△, ▽, +, –) to move ☞ to the surround mode you want, then press the SET button.**
5. **When you finish, press the EXIT button.**
   The Menu disappears from the TV screen.

Setting the parameters for the surround modes (see also pages 17 to 22)

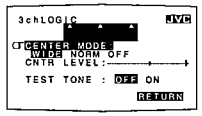
1. **Select the surround mode using the prior procedures (steps 1 to 4).**
2. **Press the cursor buttons (△, ▽, +, –) to move ☞ to "PARAMETER", then press the SET button.**
   The Parameter Setting Menu for the surround mode you have selected appears.

For HALL

See page 18



For PRO LOGIC



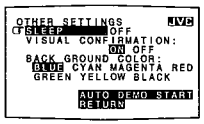
For 3CH LOGIC

See pages 20 to 22

3. **Press the cursor buttons (△, ▽, +, –) to adjust the parameters you want.**
   △, ▽: Selects the parameters
   +, –: Adjust the parameters
   For more details, see the pages referred above.
4. **When you finish, press the EXIT button.**
   The Menu disappears from the TV screen.

Using the Sleep Timer (see also page 23)

1. **Press and hold the SHIFT button until you finish the following procedures.**
2. **Press the SET button or the cursor buttons (△, ▽, +, –).**
   The MAIN MENU appears on the TV screen.
3. **Press the cursor buttons (△, ▽) to move ☞ to "OTHER SETTINGS", then press the SET button.**
   The OTHER SETTINGS Menu (see On-Screen 11) appears.

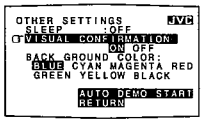


On-Screen 11

4. **Press the cursor buttons (△, ▽) to move ☞ to "SLEEP".**
5. **Press the cursor buttons (+, –) to select off-time.**
6. **When you finish, press the EXIT button.**
   The Menu disappears from the TV screen.

Using the Visual Confirmation (see also page 24)

1. **Press and hold the SHIFT button until you finish the following procedures.**
2. **Press the SET button or the cursor buttons (△, ▽, +, –).**
   The MAIN MENU appears on the TV screen.
3. **Press the cursor buttons (△, ▽) to move ☞ to "OTHER SETTINGS", then press the SET button.**
   The OTHER SETTINGS Menu appears.



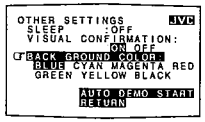
On-Screen 12

4. **Press the cursor buttons (△, ▽) to move ☞ to "VISUAL CONFIRMATION".**
   See On-Screen 12.
5. **Press the cursor buttons (+, –) to switch on or off the Visual Confirmation.**
6. **When you finish, press the EXIT button.**
   The Menu disappears from the TV screen.

Setting the background color on the TV screen

You can change the back ground color of the TV screen. This is possible only using the Menus.

1. **Press and hold the SHIFT button until you finish the following procedures.**
2. **Press the SET button or the cursor buttons (△, ▽, +, –).**
   The MAIN MENU appears on the TV screen.
3. **Press the cursor buttons (△, ▽) to move ☞ to "OTHER SETTINGS", then press the SET button.**
   The OTHER SETTINGS Menu appears.



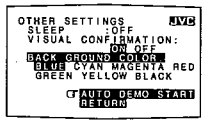
On-Screen 13

4. **Press the cursor buttons (△, ▽) to move ☞ to "BACK GROUND COLOR".**
   See On-Screen 13.
5. **Press the cursor buttons (+, –) to select the background color.**
6. **When you finish, press the EXIT button.**
   The Menu disappears from the TV screen.

Using the demonstration

You can see the demonstration of Menu operation. This is possible only using the Menus.

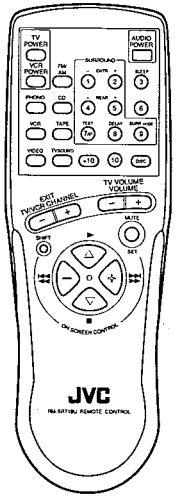
1. **Press and hold the SHIFT button until you finish the following procedures.**
2. **Press the SET button or the cursor buttons (△, ▽, +, –).**
   The MAIN MENU appears on the TV screen.
3. **Press the cursor buttons (△, ▽) to move ☞ to "OTHER SETTINGS", then press the SET button.**
   The OTHER SETTINGS Menu appears.



On-Screen 14

4. **Press the cursor buttons (△, ▽) to move ☞ to "AUTO DEMO START", then press the SET button.**
   See On-Screen 14.
5. **When you finish, press the EXIT button.**
   The Menu disappears from the TV screen, and the demonstration stops.

Using the Remote Control



You can operate JVC's audio and video components with this receiver's remote control, since control signals for JVC components are preset in the remote control.
To operate these components with the remote control, first select a source with the source selecting buttons on the remote control. Then, operate that source using the remote control.
To have the buttons function as marked in green, press the SHIFT button at the same time.

Note:
If you use the buttons on the front panel or the Menu to choose a source, the remote control will not operate that source. To operate a source with the remote control, the source must be selected using buttons on the remote control.

Tuner

After pressing the FM/AM button, you can perform the following operations:

FM/AM	Alternates between FM and AM.
1 — 10, +10	Selects a preset channel number directly To select channel number 5, press 5. For channel number 15, press +10, then 5. For channel number 20, press +10, then 10.

CD player

After pressing the CD button, you can perform the following operations on a CD player:

►	Starts playing
⏮	Returns to the beginning of the current (or previous) track
⏭	Skips to the beginning of the next track
■	Stops playing
1 — 10, +10	Selects a track number directly To select track number 5, press 5. For track number 15, press +10, then 5. For track number 20, press +10, then 10.

CD player-changer

After pressing the DISC button, you can perform the following operations on a CD player-changer:

1 — 6, 7/P	Select the number of a disc installed in a CD player-changer. Then continue to operate the CD player as described above.

Note:
If you have the CD player-changer XL-MC100C and XL-MC100M, 1 — 6 buttons function as the DISC SKIP button.
- *Press 2, 4, or 6 to skip to the next disc.*
- *Press 1, 3, or 5 to skip back to the previous disc.*

Cassette deck

After pressing the TAPE button, you can perform the following operations on a cassette deck:

►	Starts playback
◄◄	Fast winds the tape from right to left
►►	Fast winds the tape from left to right
■	Stops operation

VCR

After pressing the VCR button, you can perform the following operations on a VCR:

►	Starts playback
◄◄	Rewinds a tape
►►	Fast winds a tape
■	Stops operation
TV/VCR CHANNEL +/–	Changes the TV channels on the VCR.

TV

After pressing the TV SOUND button, you can perform the following operations on a TV:

TV/VCR CHANNEL +/–	Changes the TV channels.

You can always perform the following operation on a TV.

TV VOLUME +/–	Adjust the TV volume (always press the SHIFT button at the same time)

Note:
You can also turn the VCR and the TV on and off by pressing the VCR POWER button and TV POWER button on the remote control.

CAUTION:
If you press the cursor buttons (△, ▽, +, –) or the SET button while pressing the SHIFT at the same time, the Menu setting, for example volume level or surround setting, will change though you have not connected a TV to the receiver. When you use the Menus, make sure that you have connected a TV and operate the Menus while watching the on-screen displays on the TV.

(No. 20581) 1-17

RX-718PBK

COMPU LINK Remote Control System

COMPU LINK Remote Control System

The COMPU LINK remote control system allows you to operate JVC audio components through the remote sensor on the receiver.
To use this remote control system, you need to connect JVC audio components through the COMPU LINK-3 SYNCHRO jacks (see page 7) in addition to the connections using cables with RCA pin plugs (see page 6).
This remote control system allows you to use four functions listed below.

■ Remote Control through the Remote Sensor on the Receiver

You can control all components through the remote sensor on the receiver using this remote control.
For details, see page 30.

Note:
Aim the remote control directly at the remote sensor on the receiver.

■ Automatic Source Selection

When you press the play (►) button on a connected component or on its own remote control, the receiver automatically turns on and changes the source to the component. On the other hand, if you select a new source on the receiver or the remote control, the selected component begins playing immediately.
In both cases, the previously selected source continues playing without sound for a few seconds.

■ Automatic Power On/Off (only possible with the COMPU LINK-3 connection)

Both the CD player and cassette deck turns on and off along with the receiver.
When you turn on the receiver, the CD player or cassette deck will turn on automatically, depending on which component has been previously selected.
When you turn off the receiver, both the CD player and cassette deck will turn off.

■ Synchronized Recording

Synchronized recording means the cassette deck starts recording as soon as a CD or a record begins playing.

To use synchronized recording, follow these steps:

1 **Put a tape in the cassette deck, and a disc in the CD player (or a record on the turntable).**
2 **Press the record (●) button and the pause (II) button on the cassette deck at the same time.**
This puts the cassette deck into recording pause.

Note:
If you do not press the record (●) button and pause (II) button at the same time, the synchronized recording feature will not operate.

3 **Press the play (►) button on the CD player or on the turntable.**
The source changes on the receiver, and as soon as play starts, the cassette deck starts recording.
When the play ends, the cassette deck enters recording pause, and stops about 4 seconds later.

Notes:
- *During synchronized recording, the selected source cannot be changed.*
- *If your CD player is playing in program mode, a 4-second blank is recorded between tracks so that the music scan feature of your cassette deck can be used on the recorded tape.*
- *If the power of any component is shut off during synchronized recording, the COMPU LINK remote control system may not operate properly. In this case, you must start again from the beginning.*
- *Refer also to the manuals supplied with your audio components.*

Troubleshooting

Use this chart to help you solve daily operational problems. If there is any problem you cannot solve, contact your JVC service center.

PROBLEM	POSSIBLE CAUSE	SOLUTION
The display does not light up.	The power cord is not plugged in.	Plug the power cord into an AC outlet.
No sound from speakers.	Speaker signal cables are not connected.	Check speaker wiring and reconnect if necessary.
	The SPEAKERS 1 and 2 buttons are not set correctly.	Press the SPEAKERS 1 and 2 buttons in or out correctly.
	An incorrect source is selected.	Select the correct source.
	Mute is activated.	Press the MUTE button so that the indicator goes off.
Sound from one speaker only.	Speaker signal cables are not connected properly.	Check speaker wiring and reconnect if necessary.
	The BALANCE control is set to one extreme.	Adjust the BALANCE control properly.
Continuous hiss or buzzing during FM reception.	Incoming signal is too weak.	Connect an outside FM antenna or contact your dealer.
	The station is too far away.	Select a new station .
	An incorrect antenna is used.	Check with your dealer to be sure you have a correct antenna.
	Antennas are not connected properly.	Check connections.
Occasional cracking noise during FM reception.	Ignition noise from automobiles.	Move the antenna farther from automobile traffic.
No colors on the on-screen display.	The color system of the connected TV is not PAL.	Connect a PAL TV.
Howling during record playing.	Your turntable is too close to speakers.	Move speakers away from the turntable.
Remote control does not work.	There is an obstruction in front of the remote sensor on the receiver.	Remove the obstruction.
	Batteries are weak.	Replace batteries.

Specifications

Amplifier

Output Power	At Stereo operation	100 watts per channel, min. RMS, both channels driven into 8 ohms at 1 kHz with no more than 0.9% total harmonic distortion. (IEC268-3/DIN)
		95 watts per channel, min. RMS, both channels driven into 8 ohms, 20 Hz to 20 kHz with no more than 0.06% total harmonic distortion.
	At Surround operation Front Channels	70 watts per channel, min. RMS, driven into 8 ohms at 1 kHz with no more than 0.8% total harmonic distortion.
	Center channel	70 watts, min. RMS, driven into 8 ohms at 1 kHz, with no more than 0.8% total harmonic distortion.
	Rear channels	17 watts per channel, min. RMS, driven into 8 ohms at 1kHz, with no more than 0.8% total harmonic distortion.
Total Harmonic Distortion (8 ohms, 1 kHz)		0.06 %* at 100 watts output (* Measured by JVC Audio Analysis System)
Audio Input Sensitivity/ Impedance (1 kHz)	PHONO (MM) CD, TAPE, TV SOUND, VCR, VIDEO	2.5 mV/47 k ohms 230 mV/47 k ohms
Audio Output Level	TAPE, VCR	230 mV
Signal-to-Noise Ratio ('66 IHF/DIN)	PHONO CD, TAPE, TV SOUND, VCR, VIDEO	70 dB/78 dB (at REC OUT) 87 dB/80 dB
Frequency Response (8 ohms)	PHONO CD, TAPE, TV SOUND, VCR, VIDEO	20 Hz to 20 kHz (±1 dB) 20 Hz to 20 kHz (±1 dB)
RIAA Phono Equalization		±0.5 dB (20 Hz to 20 kHz)
LOUDNESS Control (Volume Control at –40 dB)		+6 ±1 dB at 100 Hz +4 ±1 dB at 10 kHz
Tone Control	BASS	+8 ±2 dB –8 ±2 dB at 100 Hz
	TREBLE	+8 ±2 dB –8 ±2 dB at 10 kHz

Video

Video Input Sensitivity/ Impedance	VCR, VIDEO	1 Vp-p/75 ohms
Video Output Level	VCR, MONITOR OUT	1 Vp-p (at 1 Vp-p input)
Synchronization		Negative
Signal-to-Noise Ratio		45 dB
On-Screen Color System		PAL

FM tuner (IHF)

Tuning Range		87.5 MHz to 108.0 MHz
Usable Sensitivity	Monaural	10.8 dBf (0.95 µV/75 ohms)
50 dB Quieting Sensitivity	Monaural Stereo	16.3 dBf (1.8 µV/75 ohms) 38.3 dBf (22.5 µV/75 ohms)
Signal-to-Noise Ratio (IHF-A weighted)	Monaural Stereo	80 dB at 85 dBf 73 dB at 85 dBf
Total Harmonic Distortion	Monaural Stereo	0.15 % at 1 kHz 0.2 % at 1 kHz
Stereo Separation at REC OUT		40 dB at 1 kHz
Capture Ratio		1.5 dB at 85 dBf
Alternate Channel Selectivity		60 dB: (±400 kHz)
Frequency Response		30 Hz to 15 kHz: (+0.5 dB, –3 dB)

AM tuner

Tuning Range		531 kHz to 1,602 kHz (at 9 kHz interval) 530 kHz to 1,600 kHz (at 10 kHz interval)
Usable Sensitivity	Loop antenna External antenna	300 µV/m 30µV
Signal-to-Noise Ratio		50 dB (100mV/m)

General

Power Requirements		AC 110/127/220/230-240V~, 50/60 Hz
Power Consumption		380 watts 5 watts (in standby mode)
Dimensions (W x H x D)		435 x 156 x 396 mm (17 3/16 x 6 3/16 x 15 5/8 inches)
Mass		12.5 kg (27.6 lbs)

Designs & specifications are subject to change without notice.

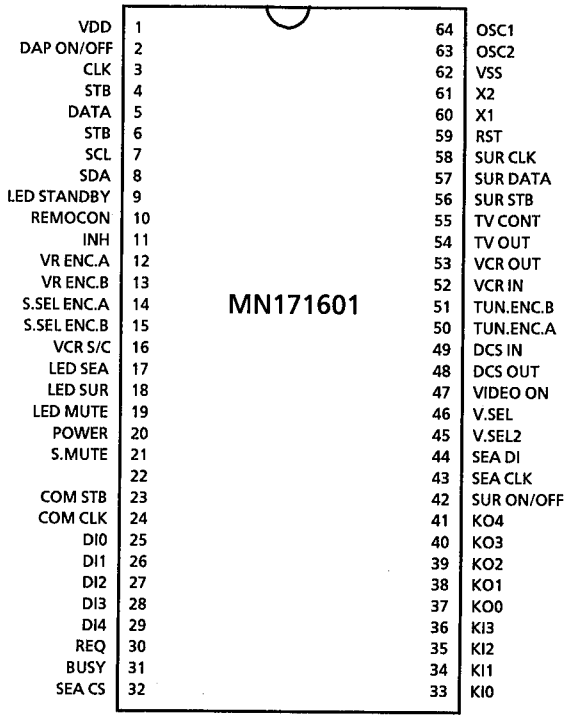
(No. 20581) 1-19

RX-718PBK

Description of Major LSIs

■ MN171601 (IC401) : SYSTEM CONTROLLER 1

1. Terminal Layout



2.Key Matrix

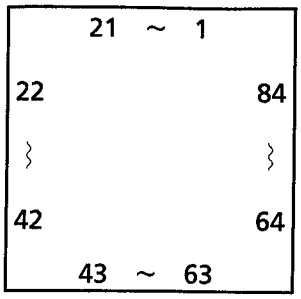
	KI0 (PIN33)	KI1 (PIN34)	KI2 (PIN35)	KI3 (PIN36)
KO0 (PIN37)	POWER (S400)	CENTER MODE (S401)	TEST (S402)	VISUAL CONFIRMATION (S403)
KO1 (PIN38)	CENTER LEVEL+ (S404)	REAR LEVEL+ (S405)	SURROUND ON/OFF (S406)	PRO LOGIC (S407)
KO2 (PIN39)	CENTER LEVEL- (S408)	REAR LEVEL- (S409)	3CH LOGIC (S410)	HALL (S411)
KO3 (PIN40)	PRESET /TUNING (S412)	CHARACTER (S491)	FM MODE /MUTE (S414)	FM/AM (S415)
KO4 (PIN41)	LOUDNESS (S416)	ENTER (S492)	MUTE (S490)	CSRP (S418)

3. Description

Pin No.	Symbol	I/O	Description	Pin NO.	Symbol	I/O	Description
1	VDD	--	Power supply	33	KI0	I	Key matrix Input
2	DAP ON/OFF	--	Nut used	34	KI1	I	Key matrix Input
3	CLK	O	Clock to IC305,IC307	35	KI2	I	Key matrix Input
4	STB	O	Strbe signal to IC305	36	KI3	I	Key matrix Input
5	DATA	O	Data to IC305,IC307	37	KO0	O	Key matrix output
6	STB	O	Strbe signal to IC307	38	KO1	O	Key matrix output
7	SCL	--	Not used(GND)	39	KO2	O	Key matrix output
8	SDA	--	Not used(GND)	40	KO3	O	Key matrix output
9	LED STANDBY	O	STANDBY LED control signal	41	KO4	O	Key matrix output
10	REMOCON	I	Remote signal input	42	SUR ON/OFF	O	SURROUND ON/OFF control
11	INH	I	Inhibit signal input	43	SEA CLK	O	Clock to IC551(RX-770VBK)
12	VR ENC.A	I	R. Encorder control signal input (VOL)	44	SEA DI	O	Data to IC551(RX-770VBK)
13	VR ENC. B	I	R. Encorder control signal input (VOL)	45	V.SEL 2	O	Not used
14	S.SEL ENC.A	I	R. Encorder control signal input(SOURCE)	46	V.SEL	O	VIDEO SELCT signal output
15	S.SEL ENC.B	I	R. Encorder control signal input(SOURCE)	47	VIDEO ON	O	VIDEO ON/OFF control signal
16	VCR S/C	I	VCR S/C signal	48	DCS OUT	O	Compulink signal output
17	LED SEA	O	SEA indication control	49	DCS IN	I	Compulink signal input
18	LED SUR	O	SURROUND indication control	50	TUN.ENC.A	I	R. Encorder control signal input (TUNER)
19	LED MUTE	O	MUTE indication control	51	TUN.ENC.B	I	R. Encorder control signal input (TUNER)
20	POWER	O	POWER ON/OFF control	52	VCR IN	I	AV COMPULINK
21	S.MUTE	O	SOUECE MUTE control	53	VCR OUT	O	AV COMPULINK
22		--		54	TV OUT	O	AV COMPULINK
23	COM STB	O	Strobe signal to IC400	55	TV CONT	O	AV COMPULINK
24	COM CLK	O	Clock to IC400	56	SUR STB	O	Strobe signal for IC601,IC641
25	DI0	I/O	Data signal to IC400	57	SUR DATA	O	Data signal for IC601.IC641
26	DI1	I/O	Data signal to IC400	58	SUR CLK	O	Clock output for IC601.IC641
27	DI2	I/O	Data signal to IC400	59	RST	I	Reset signal input
28	DI3	I/O	Data signal to IC400	60	X1	--	GND
29	DI4	I/O	Data signal to IC400	61	X2	--	Not used
30	REQ	I	Request signal for IC400	62	VSS	--	GND
31	BUSY	I	Busy signal from IC400	63	OSC2	--	Oscillation terminal
32	SEA CS	I	Chip select RX-718/RX-770	64	OSC1	--	Oscillation terminal

■ MN172412 (IC400)
: SYSTEM CONTROLLER 2

1. Terminal Layout

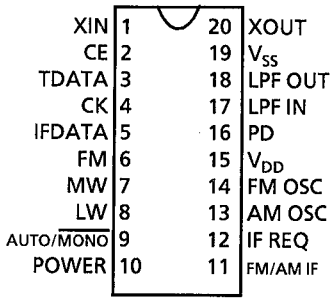


3. Description

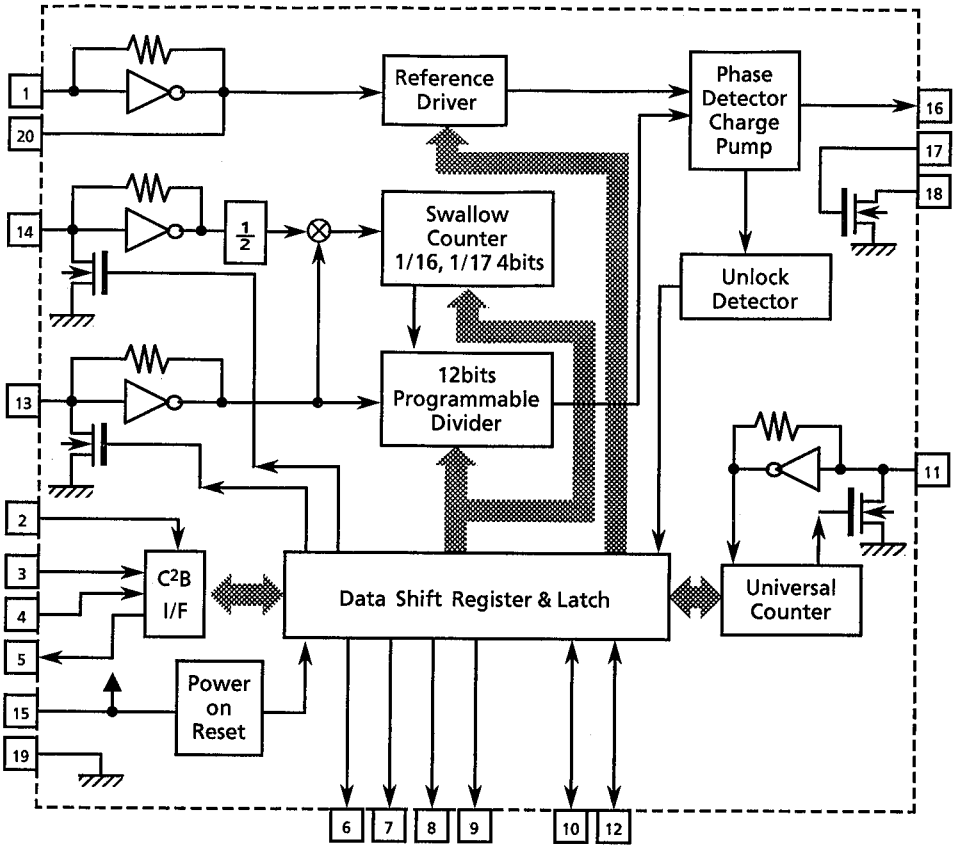
Pin No.	Symbol	I/O	Description	Pin No.	Symbol	I/O	Description
1		--	GND	43	OSD SIN	I	Data for IC222
2		--	GND	44	OSD ON	O	ON SCREEN on/off
3		--	GND	45	T.CLK	I	Clock input for IC191
4		--	GND	46	IFDATA	I	Data signal for IC191
5		--	GND	47	T.DATA	I	Datasignal for IC191
6	17G	O	Grid control signal	48	COMSTB	I	Strobe signal for IC401
7	16G	O	Grid control signal	49	COMCLK	I	Clock to IC401
8	15G	O	Grid control signal	50	TUNED	I	TUNED signal to IC104
9	14G	O	Grid control signal	51	STEREO	I	STEREO signal to IC105
10	13G	O	Grid control signal	52	T.MUTE	O	TUNER MUTEsignal output
11	12G	O	Grid control signal	53	T.CS	I	TUNER chip select
12	11G	O	Grid control signal	54	CE	I	Fix the chip enable
13	10G	O	Grid control signal	55		--	GND
14	9G	O	Grid control signal	56		--	GND
15	8G	O	Grid control signal	57		--	GND
16	7G	O	Grid control signal	58		--	GND
17	6G	O	Grid control signal	59		--	GND
18	5G	O	Grid control signal	60	DI0	I/O	Data signal to IC401
19	4G	O	Grid control signal	61	DI1	I/O	Data signal to IC401
20	3G	O	Grid control signal	62	DI2	I/O	Data signal to IC401
21	2G	O	Grid control signal	63	DI3	I/O	Data signal to IC401
22	1G	O	Grid control signal	64	DI4	I/O	Data signal to IC401
23	VPP	--	Power supply	65	REQ	O	Request signal for IC401
24	S1	O	Segment control signal	66	BUSY	O	Busy signal from IC401
25	S2	O	Segment control signal	67	INH	I	Inhibit signal input
26	S3	O	Segment control signal	68	RST	I	Reset signal input
27	S4	O	Segment control signal	69	X1	--	GND
28	S5	O	Segment control signal	70	X2	--	Not used
29	S6	O	Segment control signal	71	VSS	--	GND
30	S7	O	Segment control signal	72	OSC2	--	Oscillation terminal
31	S8	O	Segment control signal	73	OSC1	--	Oscillation terminal
32	S9	O	Segment control signal	74	VDD	--	Power supply
33	S10	O	Segment control signal	75	VL/VH	O	R800,R801 control
34	S11	O	Segment control signal	76	4/8Ω SEL	I	4/8Ω select
35	S12	O	Segment control signal	77	4/8Ω DETECT	I	
36	S13	O	Segment control signal	78	MODEL CS	I	J,C/U select
37	S14	O	Segment control signal	79		--	GND
38	S15	O	Segment control signal	80		--	GND
39	S16	O	Segment control signal	81		--	GND
40	OSD CS	O	Chip select signal for IC222	82		--	GND
41	SCK	O	Clock output for IC222	83		--	GND
42	OSC	--	GND	84		--	GND

■ LC72131M (IC121) : PLL Synthesizer

1. Terminal Layout



2. Block Diagram



3. Pin Functions

Pin No.	Symbol	I/O	Functions	Pin No.	Symbol	I/O	Functions
1	X in	I	Crystal oscillator (7.2MHz).	11	FM/AM IF	I	Universal counter input
2	CE	I	Fix the chip enable to "H" when inputting (DI) and outputting (DO) the serial data.	12	IF REQ	O	Output the "IF-signal request" to IC102
3	TDATA	I	Receive the control data from the controller (IC201).	13	AM IN	I	Input the local oscillator signal of AM.
4	CK	I	This clock is used to synchronize data when transmitting the data of DI and DO.	14	FM IN	I	Input the local oscillator signal of FM.
5	IFDATA	O	Transmit the data from LC72131M to the controller which is synchronized with CK.	15	V_{DD}	--	This is a terminal of power supply.
6	FM	O	It is "L" on FM mode.	16	PD	O	PLL charge pump output : When the local oscillator signal frequency is higher than the reference frequency high level signals will output. When it is lower than the reference frequency, low level signals will output. When it is same as reference frequency signals, it will be floating.
7	MW	O	It is "L" on MW mode.	17	LPF IN	I	Transistor used for the PLL active low-pass filterr
8	LW	O	It is "L" on LW mode.	18	LPF OUT	O	Transistor used for the PLL active low-pass filterr
9	AUTO/ MONO	O	It is "L" on monaural, "H" on auto.	19	V_{SS}	--	Connected to GND
10	POWER	O	Regulator control singal P ON "H", STANDBY "L"	20	X out	O	Crystal oscillator (7.2MHz).

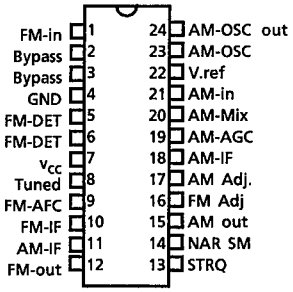
■ LA1266A (IC104) : FM AM IF AMP & detector

1. The main function descriptions

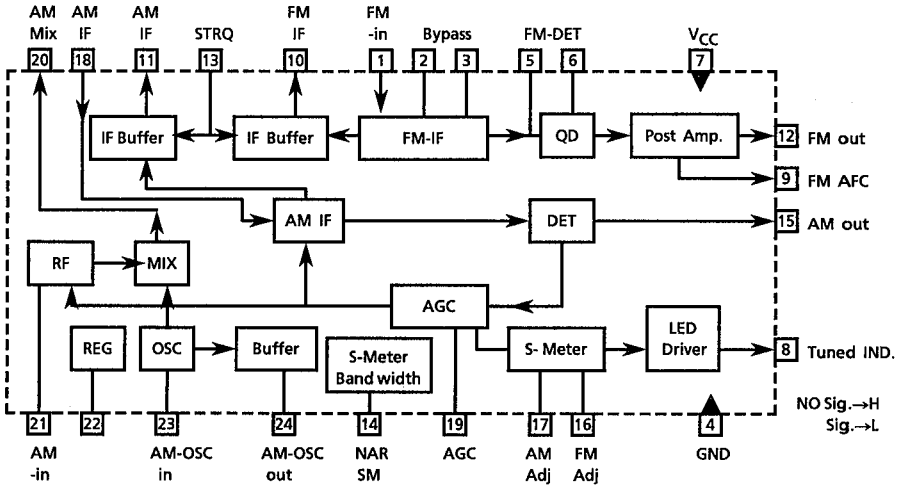
(1) Amplify and detect of FM intermodulation frequencies.

(2) It has local oscillator and mixer for AM, and amplify the AM-IF signal.

2. Top View



3. Block Diagram



4. Pin Function Description

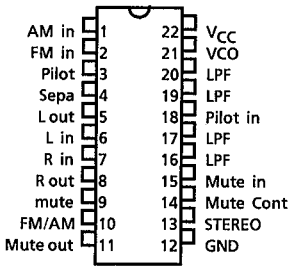
Pin No.	Symbol	I/O	Functions and Operations
1	FM in	I	This is an input terminal of FM IF Signal.
2, 3	Bypass	--	Bypass of FM IF Amp.
4	GND	--	This is the device ground terminal.
5, 6	FM DET	--	FM detect transformer.
7	V_{CC}	--	This is the power supply terminal.
8	Tuned	O	When the set is tuning, this terminal become "L".
9	FM AFC	O	This is an output terminal of voltage for FM - AFC.
10	FM IF out	O	When the IF REQ signal of IC251(LC7218) applies to pin13, the signal of FM IF outputs.
11	AM IF out	O	When the IF REQ signal of IC251(LC7218) applies to pin13, the signal of AM IF outputs.
12	FM out	O	FM detection output.
13	STRQ	I	The IF-signals come out from pin10 (FM-IF) or pin11 (AM-IF) while this terminal goes to "High".
14	NAR SM	--	Control the Band-width of AM signal meter.
15	AM out	O	AM detection output.
16	FM Adj	--	For adjust the stop level (or mute level) of FM.
17	AM Adj	--	For adjust the stop level (or mute level) of AM.
18	AM-IF	I	Input of AM IF Signal.
19	AM-AGC	I	This is an AGC voltage Input terminal for AM.
20	AM-MIX	O	This is an output terminal for AM mixer.
21	AM-IN	I	This is an input terminal for AM RF Signal.
22	V.REF	--	Control the Band-width of FM signal meter.
23	AM-OSC	--	This is a terminal of AM Local oscillation circuit.
24	AM-OSC out	O	AM Local Oscillation Signal output.

■ LA3401 (IC105) : FM MPX Detector

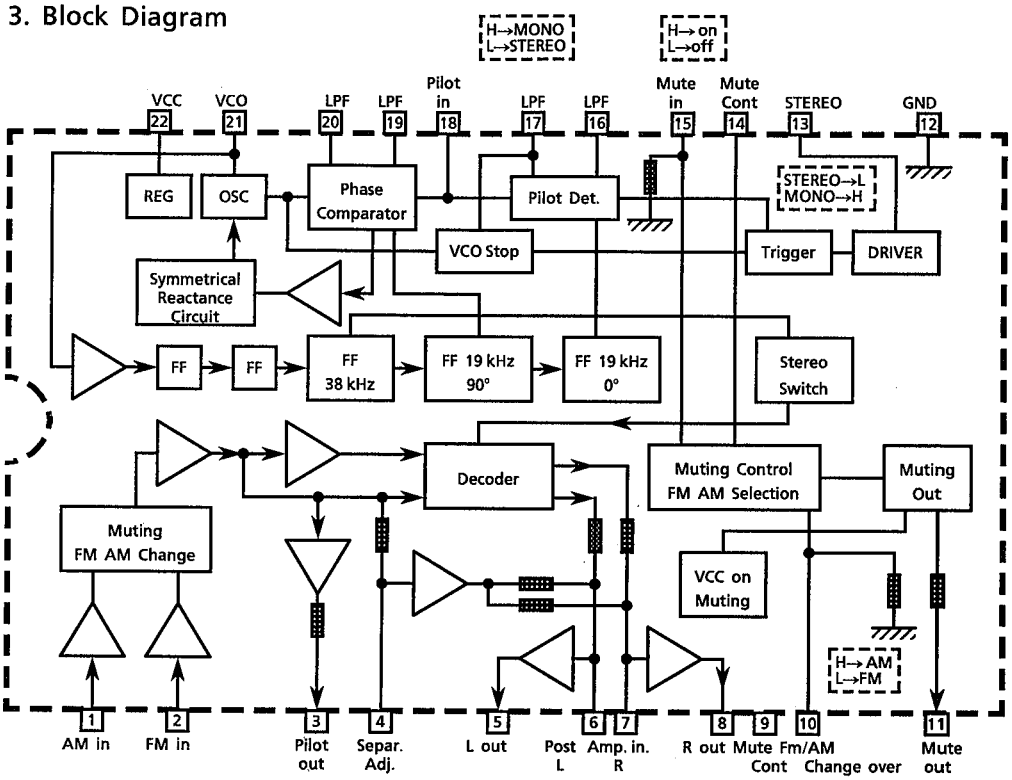
1. The main function descriptions

(1) Detect the FM Multiplex Signal (Stereo signal).
(2) When receiving FM Stereo Signal, it outputs the signal for indicator.
(3) AM / FM Audio Amplifier.

2. Terminal Layout



3. Block Diagram

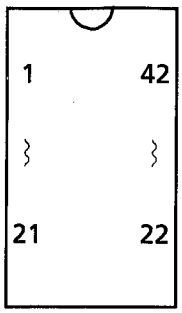


4. Pin Function Description

Pin No.	Symbol	I/O	Functions and Operations
1	AM in	I	This is an input terminal for AM detection signal.
2	FM in	I	This is an input terminal for FM detection signal.
3	Pilot out	O	Output of MPX pilot signal (Connect to Pin18).
4	Sepa. Adj.	--	Separation adjustment.
5	L. out	O	Left channel signal output.
6	L	O	Reversal output of Pin5.
7	R	O	Reversal output of Pin8.
8	R out	O	Right channel signal output
9	Mute Cont	--	The mute time is controlled by the connected capacitor when turning the power switch on.
10	FM / AM	I	Change over the FM / AM input. "H" : AM, "L" : FM
11	Mute out	--	Not use
12	GND	--	Ground terminal.
13	Stereo	O	Stereo indicator output. Stereo : "L", Mono : "H"
14	Mute Cont	--	The mute time is controlled by the connected capacitor when changing over the FM / AM .
15	Mute in	I	MutE signal input."H" : Mute on, "L" : Mute off.
16	LPF	--	Low pass filter of pilot detector.
17	LPF	--	While this terminal goes to "H", the VCO stop.
18	Pilot in	I	Pilot input.
19	LPF	--	Low-pass filter of PLL.
20	LPF	--	Low-pass filter of PLL.
21	VCO	I	Voltage controlled oscillator terminal.
22	V_{CC}	--	Power supply.

■ LA2785 (IC601) : Dolby Pro Logic Surround Signal Processor

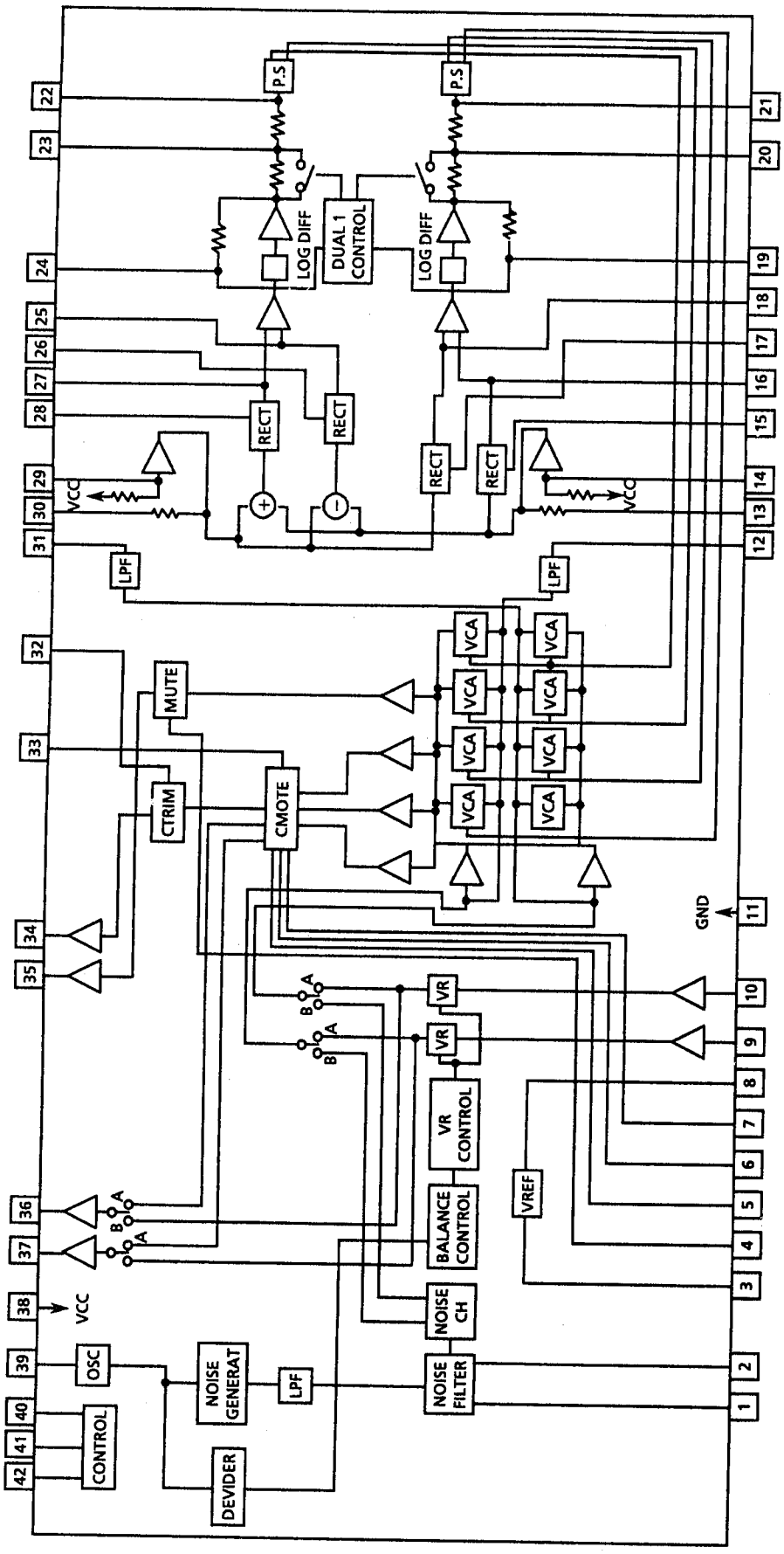
1. Terminal Layout



2. Pin Functions

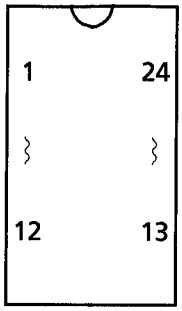
Pin No	Symbol	I/O	Functions	Pin No	Symbol	I/O	Functions
1	NS-BPF1	--	Capacitor for spectrum filter in noise sequencer	22	VCS-1	--	Capacitor for time constant (in log differential area)
2	NS-BPF2	--	Capacitor for spectrum filter in noise sequencer	23	VCS-2	--	Capacitor for time constant (in log differential area)
3	VREF	--	Analog reference voltage	24	VCS-TH	--	Capacitor for time constant (in log differential area)
4	S-DC-OUT	--	Capacitor for DC-cut Sch	25	L+R RECT	--	Capacitor for Center channel detection
5	C-DC-OUT	--	Capacitor for DC-cut Cch	26	DC-CUT	--	Capacitor for DC-cut at detection circuit
6	L-DC-OUT	--	Capacitor for DC-cut Lch	27	L−R RECT	--	Capacitor for Surround channel detection
7	R-DC-OUT	--	Capacitor for DC-cut Rch	28	DC-CUT	--	Capacitor for DC-cut at detection circuit
8	VREF-BUFFER	--	VREF low impedance	29	R-BPF3	--	LPF,HPF for Right channel control circuit
9	L-IN	I	Left channel signal input	30	R-BPF2	--	LPF,HPF for Right channel control circuit
10	R-IN	I	Right channel signal input	31	R-BPF1	--	LPF,HPF for Right channel control circuit
11	GND	--	Ground	32	C-TRIM DC-CUT	--	Capacitor for DC-cut Center channel
12	L-BPF1	--	LPF,HPF for Lch control circuit	33	C-MODE-CAP	--	Capacitor for Center channel output low-pass filter
13	L-BPF2	--	LPF,HPF Left channel control circuit	34	C-OUT	O	Center signal output
14	L-BPF3	--	LPF,HPF Left channel control circuit	35	S-OUT	O	Surround signal output
15	DC-CUT	--	Capacitor for DC-cut at detection circuit	36	R-OUT	O	Right channel signal output
16	R RECT	--	Capacitor for Right channel detection	37	L-OUT	O	Left channel signal output
17	DC-CUT	--	Capacitor for DC-cut at detection circuit	38	VCC	--	power supply
18	L RECT	--	Capacitor for Left channel detection	39	OSC	--	Oscillation for noise sequencer and auto balance
19	VLR-TH	--	Capacitor for time constant (in log differential area)	40	STB	I	Strobe signal input
20	VLR-2	--	Capacitor for time constant (in log differential area)	41	DATA	I	Serial interface data input
21	VLR-1	--	Capacitor for time constant (in log differential area)	42	CLK	I	Serial interface clock

3. Block Diagram

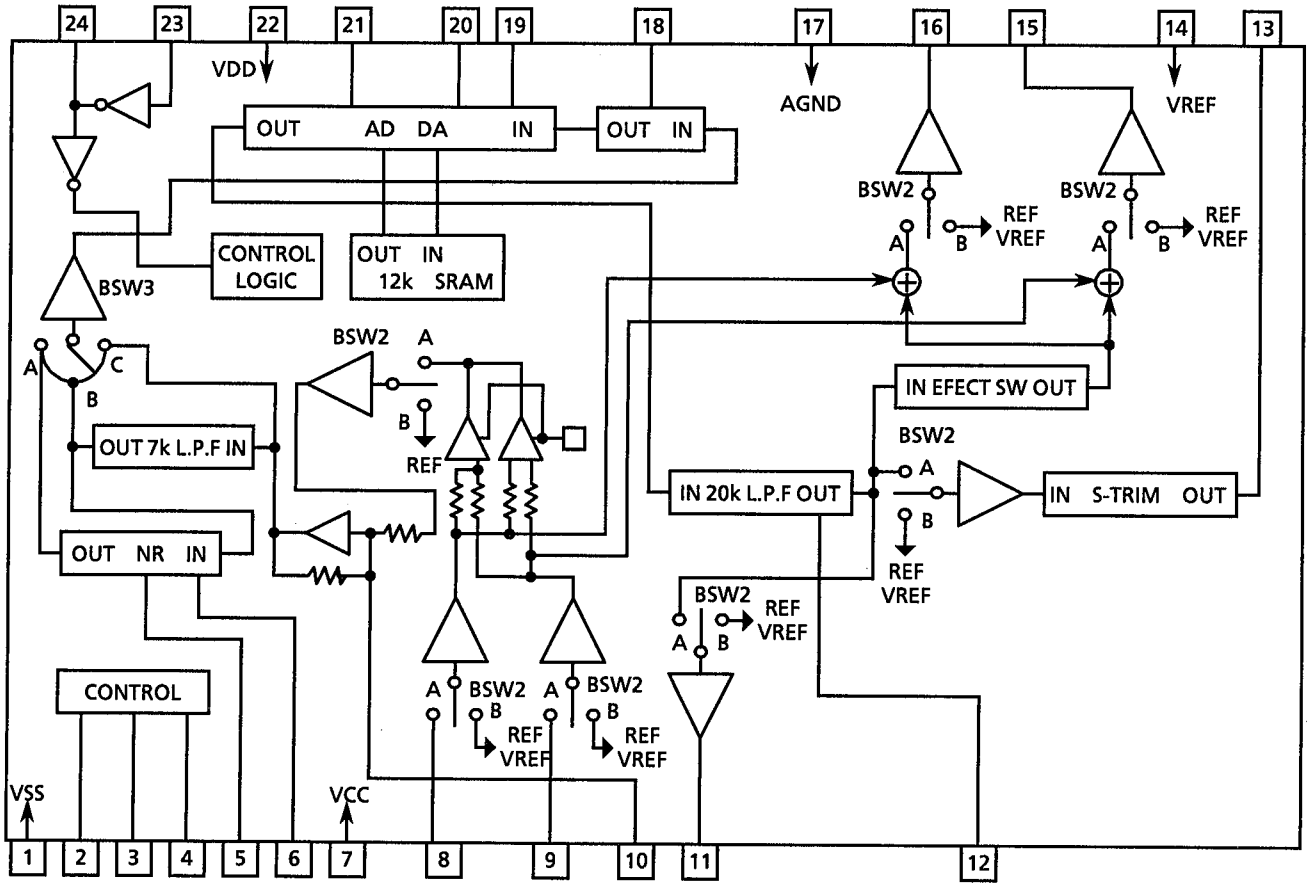


■ LV1011 (IC641) : Dolby Surround Passive Decoder

1. Terminal Layout

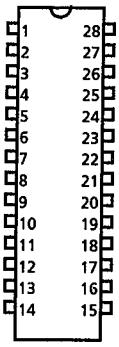


2. Block Diagram

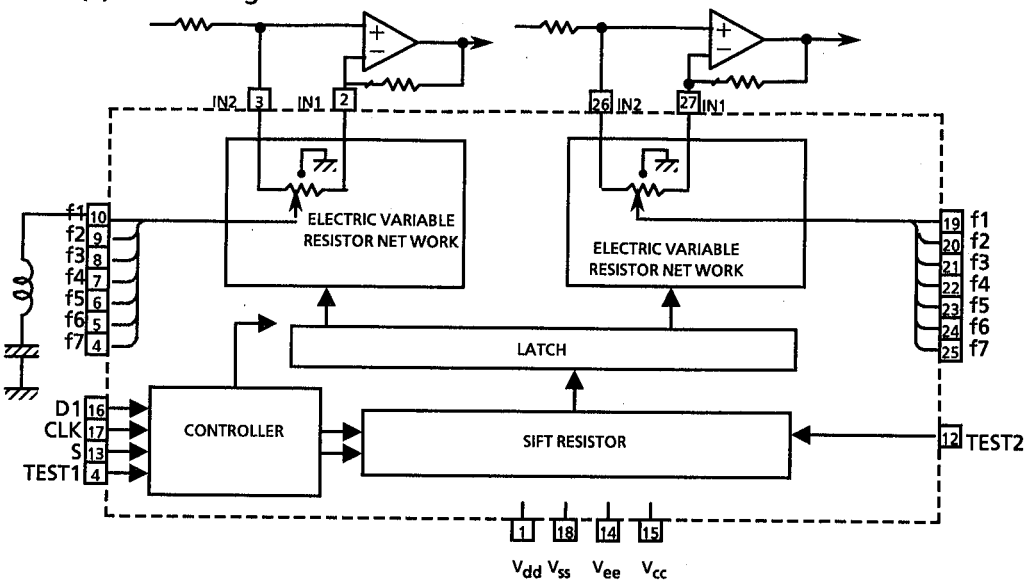


■ IC551 : LC7522 (Variable Resistor for SEA Control)

(1) Terminal Layout



(2) Block Diagram



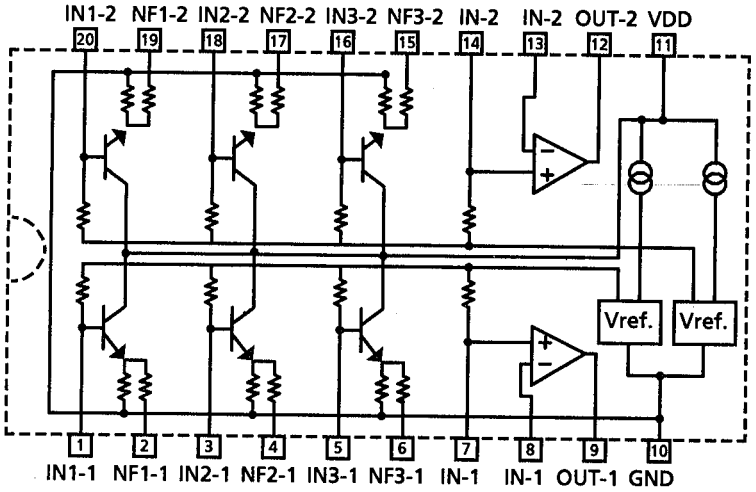
(3) Pin Functions

Pin No.	Pin Name	Functions
1 18 14 15	V_{DD} V_{SS} V_{EE} V_{CC}	Power supply +7V for audio signal Ground. Power supply −7V for audio signal. Power supply +5V
2,27 3, 26	IN 1 IN 2	Audio signal input The inversion signal of the operational amplifier inputs to IN 1 normally. The non-inversion signal of the operational amplifier inputs to IN 2 normally.
16	DI	Data input from the CPU. Schmitt inverter type
17	CLK	Clock signal input from the CPU. Schmitt inverter type
4~10 19~25	f1~f7	For connect to band-pass filter. f1~f7x2 (Left and Right)
11 12	TEST 1 TEST 2	Not use Not use
13	S	Chip Select
28	NC	Not use

■ M5243P (IC552) : S.E.A. Graphic Equalizer

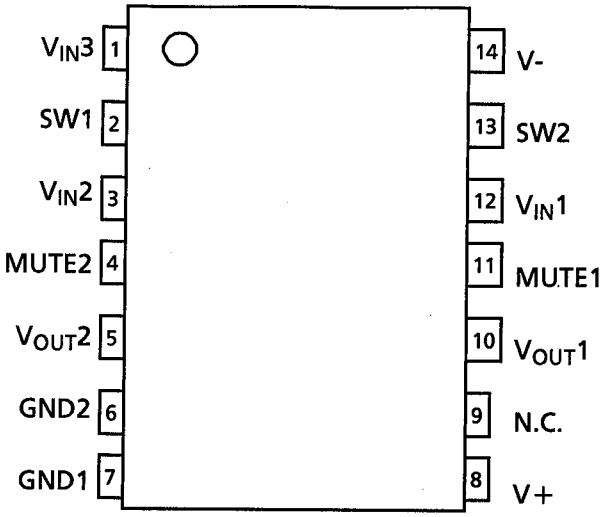
1. Functions
   It makes inductive characteristic instead of coil.

2. Block Diagram

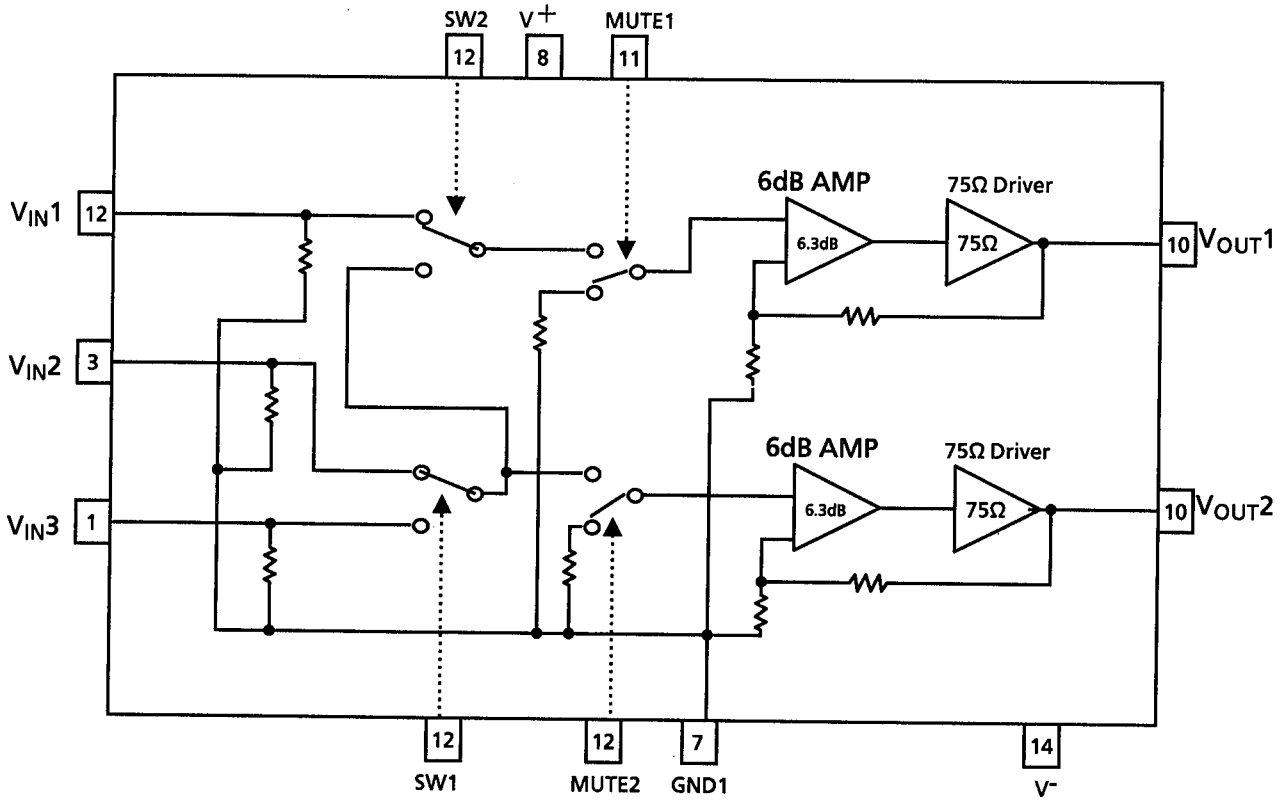


■ IC221 : NJM2279D (Video Switch)

(1) Terminal Layout

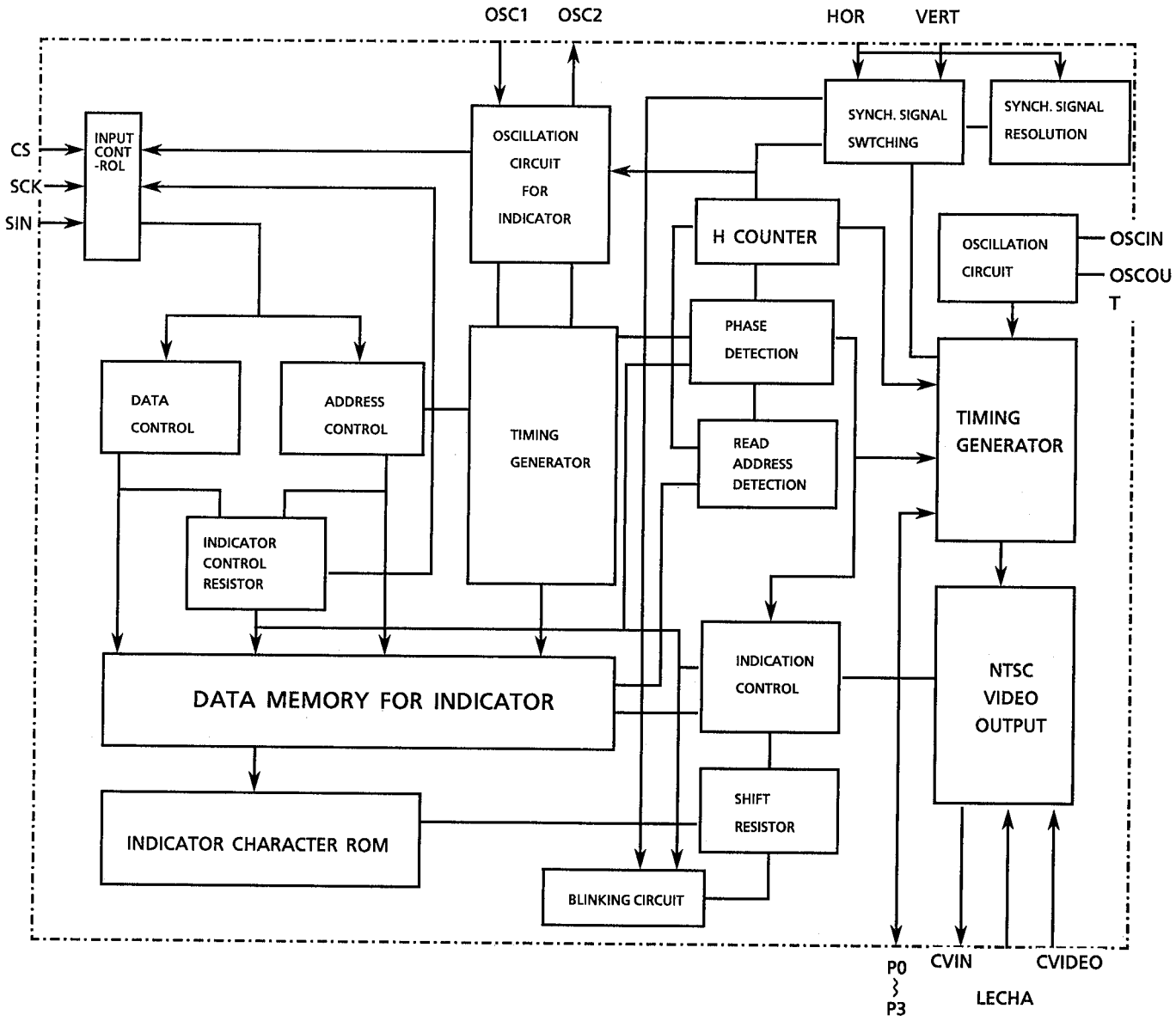


(2) Block Diagram



■ IC222 : M35012-120SP (ON SCREEN IC)

(2) Block Diagram



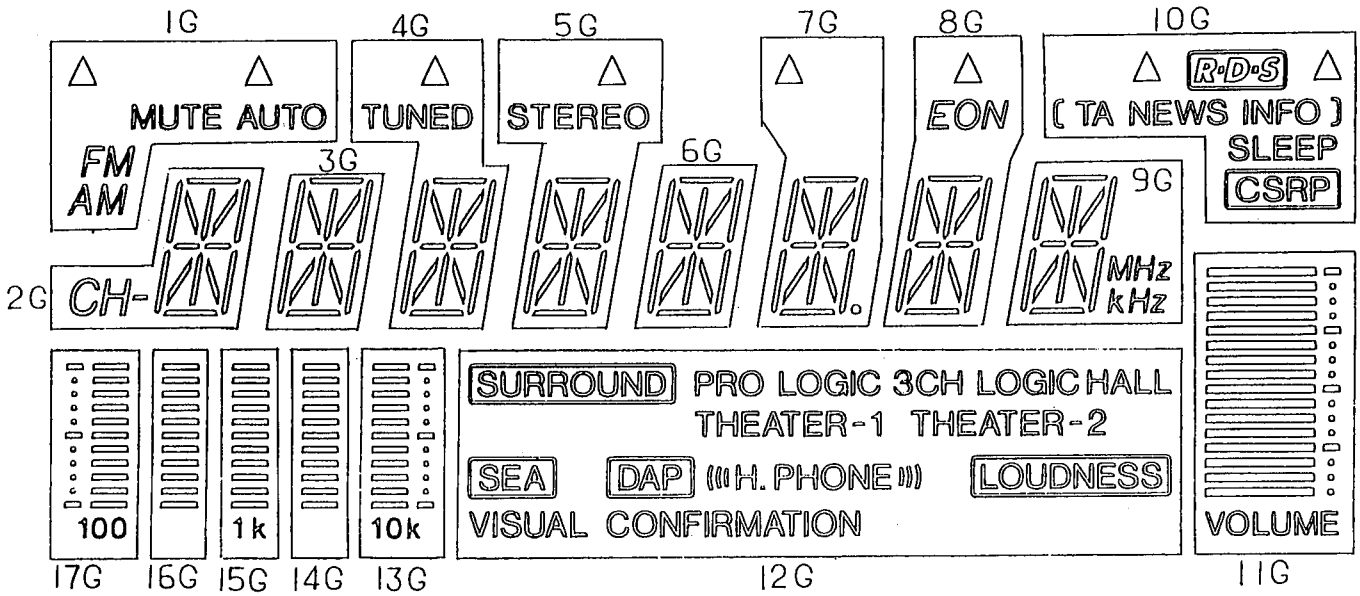
(3) Pin Functions

Pin No.	Pin Name	Functions
1	OSC1	Oscillation terminal
2	OSC2	Oscillation terminal
3	CS	Chip Select
4	SCK	Serial clock signal
5	SIN	Serial data input
6	AC	Auto clear input
7	VDD2	Power supply
8	OSC OUT	Composite video signal input
9		NC
10		NC
11	VSS	GND
12		NC
13		NC
14		NC
15		NC
16	OSCOUT	Oscillation terminal
17	OSCIN	Oscillation terminal
18	GND	
19	GND	
20	VDD1	Power supply

Internal Connections of the FL Display

■ELU0001-215 : DI400

Grid Separation



Pin Connection

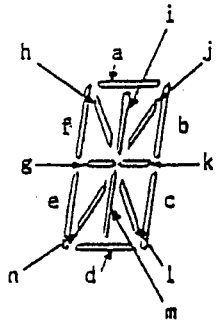
TERMINAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14							
ELECTRODE	F1	F1	F1	NP	17G	16G	15G	14G	13G	12G	11G	10G	9G	8G							
TERMINAL NO.	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
ELECTRODE	7G	6G	5G	4G	3G	2G	1G	NP	NP	NP	NP	NP	NP	P S1	P S2	P S3	P S4	P S5	P S6	P S7	
TERMINAL NO.								35	36	37	38	39	40	41	42	43	44	45	46	47	
ELECTRODE								P S8	P S9	P S10	P S11	P S12	P S13	P S14	P S15	P S16	NP	F2	F2	F2	

Notes F: Filament NP: No Pin
G: Grid
P: Anode

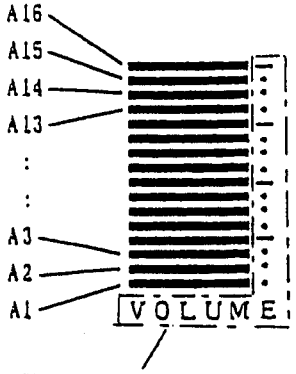
Internal Conection · Anode Designation

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G
S1		a	a	a	a	a	a	a	a	CSRP
S2		b	b	b	b	b	b	b	b	SLEEP
S3		i	i	i	i	i	i	i	i	TA
S4		j	j	j	j	j	j	j	j	NEWS
S5		h	h	h	h	h	h	h	h	INFO
S6		f	f	f	f	f	f	f	f	[]
S7		k	k	k	k	k	k	k	k	△(Right)
S8		g	g	g	g	g	g	g	g	R.D.S
S9		c	c	c	c	c	c	c	c	△(Left)
S10		l	l	l	l	l	l	l	l	
S11	FM	n	n	n	n	n	n	n	n	
S12	AM	m	m	m	m	m	m	m	m	
S13	MUTE AUTO	e	e	e	e	e	e	e	e	
S14		d	d	d	d	d	d	d	d	
S15	△(Left)	CH-		TUNED	STEREO		(DOT)	EON	MHz	
S16	△(Right)			△	△		△	△	KHz	

	11G	12G	13G	14G	15G	16G	17G
S1	A1						
S2	A2	LOUDNESS					Scale(Left)
S3	A3	VISUAL CONFIRMATION	10k		1k		100
S4	A4						
S5	A5		B1	B1	B1	B1	B1
S6	A6		B2	B2	B2	B2	B2
S7	A7		B3	B3	B3	B3	B3
S8	A8	THEATER-2	B4	B4	B4	B4	B4
S9	A9	HALL	B5	B5	B5	B5	B5
S10	A10	3CH LOGIC	B6	B6	B6	B6	B6
S11	A11	H.PHONE	B7	B7	B7	B7	B7
S12	A12	THEATER-1	B8	B8	B8	B8	B8
S13	A13	PRO LOGIC	B9	B9	B9	B9	B9
S14	A14	DAP	B10	B10	B10	B10	B10
S15	A15	SEA	B11	B11	B11	B11	B11
S16	A16	SURROUND	Scale(Right)				

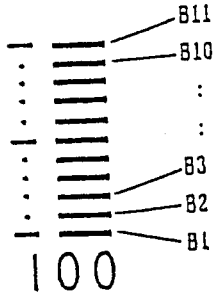


11G



·These segments pattern are connected to 11G.

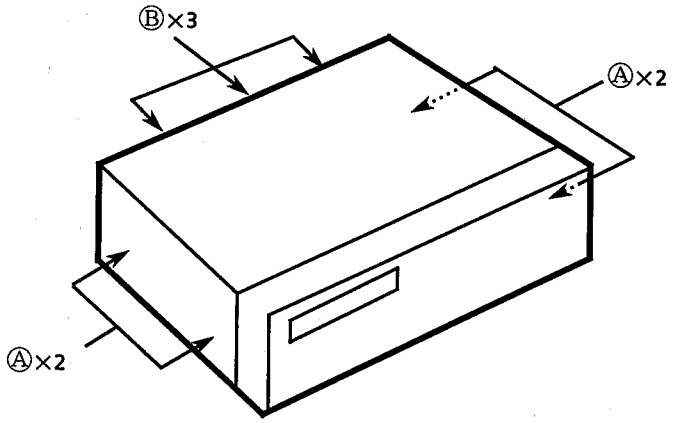
17G



·The segment pattern of 13G to 16G is same as above.

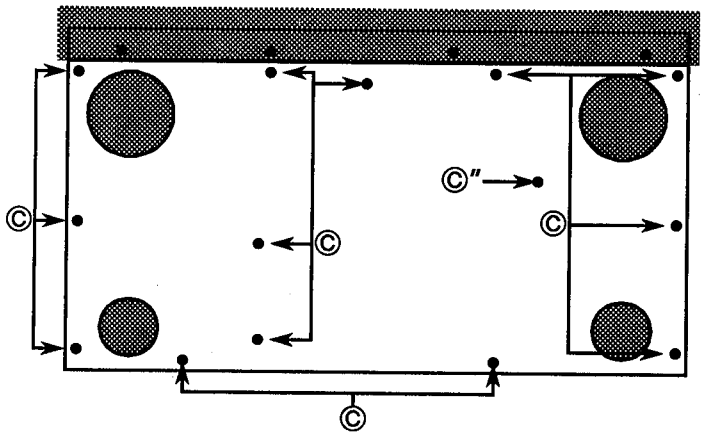
Disassembly Procedures

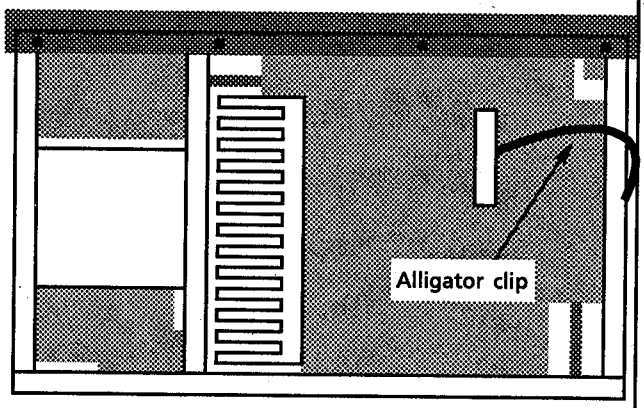
(1) Removing the top cover
1. Remove 4 screws Ⓐ fastening both sides of top cover, and 3 screws Ⓑ fastening the rear side.
2. Remove the top cover.



(2) Removing the Bottom Cover
1. Remove 14 screws Ⓒ and Ⓒ".
2. Remove the bottom cover.

※ The screw Ⓒ" which secures the bottom cover is also used for ground.
It is necessary to ground before checking after the bottom cover is removed.

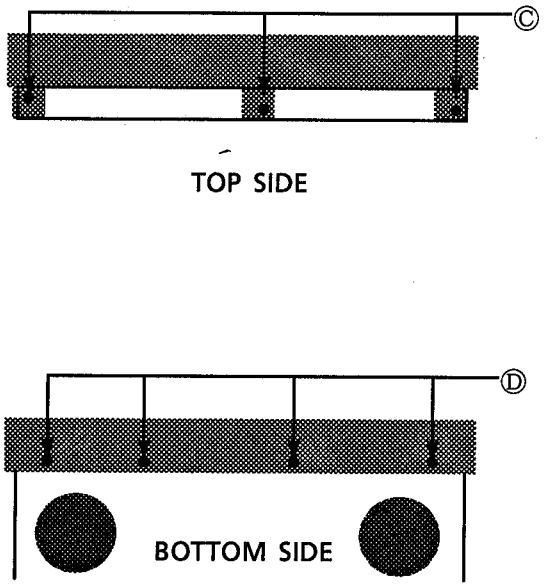




Ⓐ .. E61660-004 Ⓑ ... E73273-006 Ⓒ,Ⓒ" SBSG3008CC

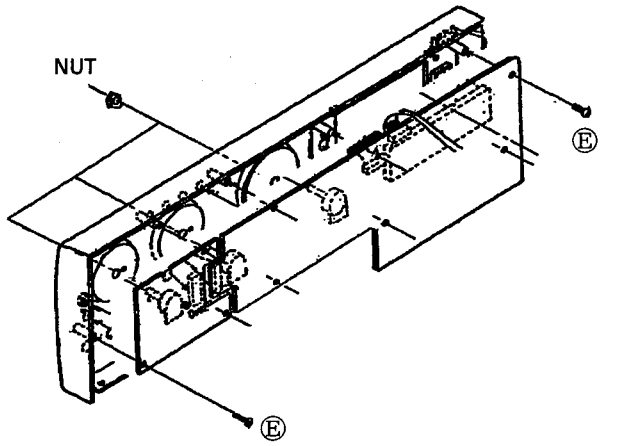
(3) Removing the Front Panel Assembly

1. Removing the top cover.
2. Remove 3 screws Ⓒ fastening top of the front panel, and 4 screws Ⓓ fastening bottom of it.
3. Remove the Center tone knob, bass knob ,treble knob and Balance knob.
4. Remove the front panel disconnecting some wires. (CN401,CN413)



(4) Removing the Front P.C. Board

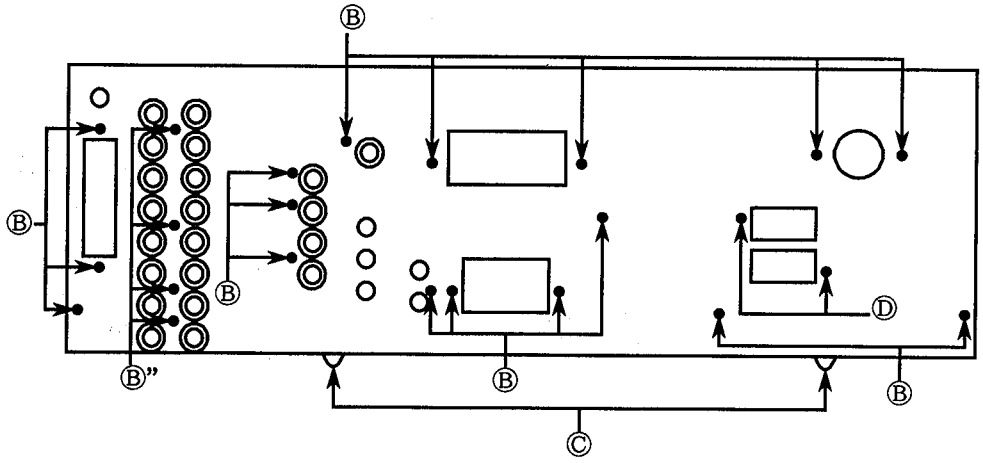
1. Removing the top cover.
2. Removing the front panel assembly.
3. Remove 9 screws Ⓔ.
4. Remove the Master volume knob,tuner control knob and source selector knob.
5. Remove 2 nut fastening the rotary encoder.
6. Remove a nut fastening the Master volume.
7. Remove the front P.C. Board.



(5) Removing the Rear Panel

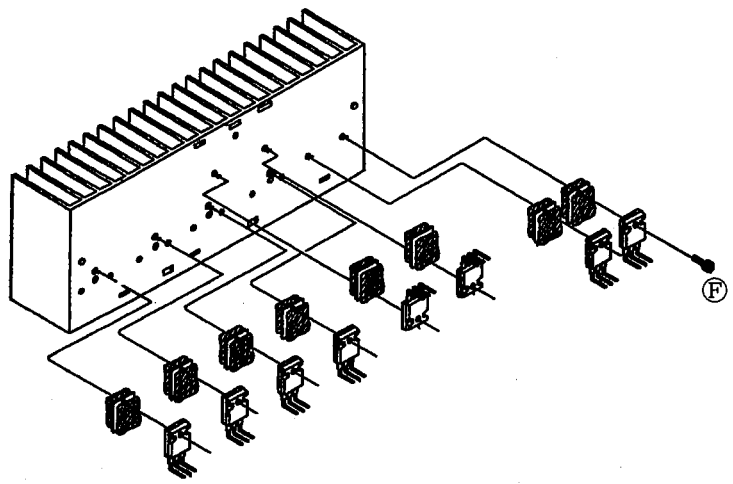
1. Removing the top cover.
2. Remove 21 screws Ⓑ,Ⓑ" and 2 screws Ⓓ .
3. Remove 2 screws Ⓒ fastening bottom sides of rear panel.
4. Take it out.

※ 4pcs. of screw Ⓑ" which secure the rear panel are also used for ground. Installing of those screws is required before checking.



Ⓑ,Ⓑ" E73273-006 Ⓒ SBSG3008CC Ⓓ SDSG3008M Ⓔ SDSF2608Z

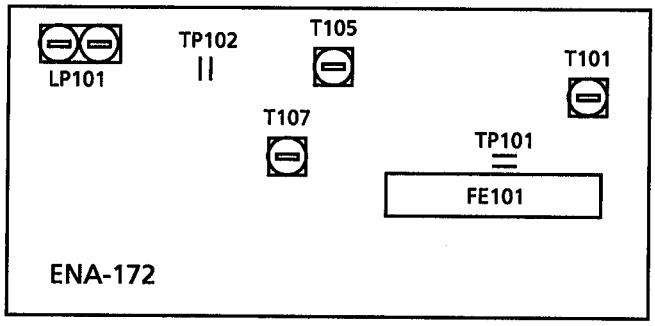
(6) Removing the Power Transistor
1. Remove the top cover and bottom cover.
2. Unsolder the broken transistor.
3. Remove the some screws Ⓕ fastening it.
4. Remove it.



Ⓕ .. E73525-003

ADJUSTMENT PROCEDURES

■ Tuner section



Tuning range

Area	Range	
	MW (kHz)	FM (MHz)
Universal type (AM Channel space 9kHz)	531~1602	87.5MHz~ 108MHz
Universal type (AM Channel space 10kHz)	530~1600	

(1) Tuning Voltage
Confirm the voltages in the table at TP101.

FM Tuning voltage (Unit : V)

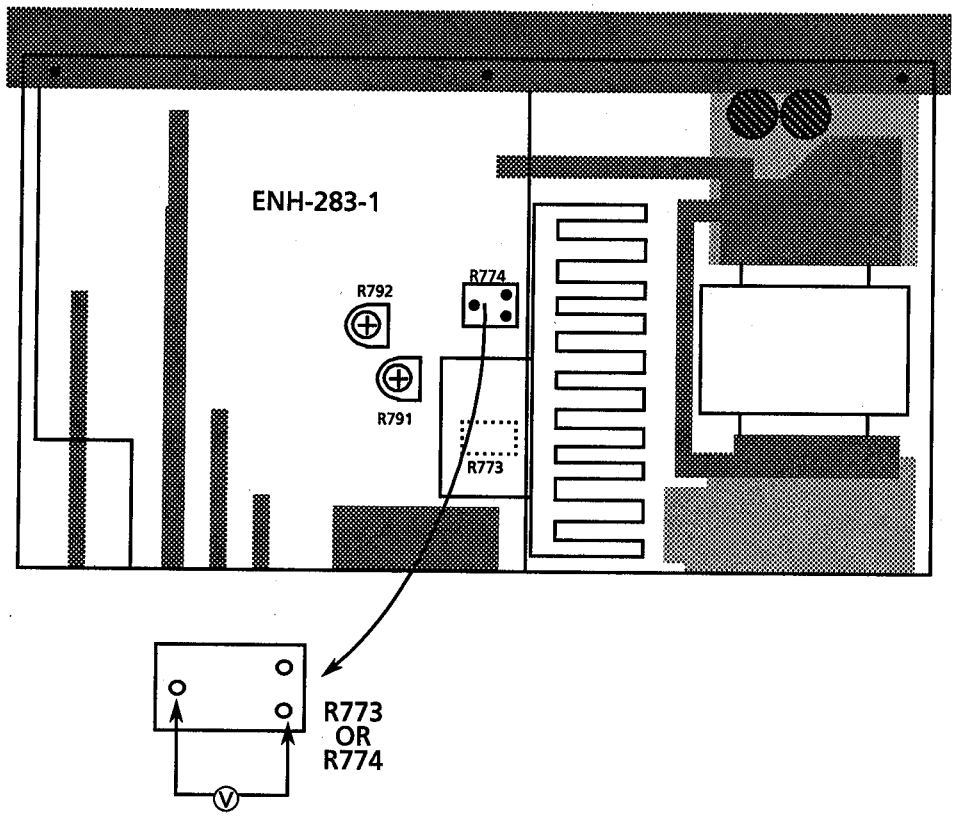
Area	Frequency	
	87.5MHz	108MHz
Universal	1.6±1.0	8.0±2.0

AM Tuning voltage (Unit : V)

Area	Frequency (MW)						
	522KHz	530KHz	531KHz	1600KHz	1602KHz	1629KHz	1710KHz
Universal (Chanel space9kHz)	—	—	1.0 > 0.5	—	7.2±0.7	—	—
Universal (Chanel space10kHz)	—	1.0 > 0.5	—	7.2±0.7	—	—	—

(2) FM Center meter
Receive a broadcast by using the function of 'AUTO STOP'.
Adjust T105 (Detector coil) so taht the voltage at TP102 becomes 0±1.5mV.

■ Power Amplifier section



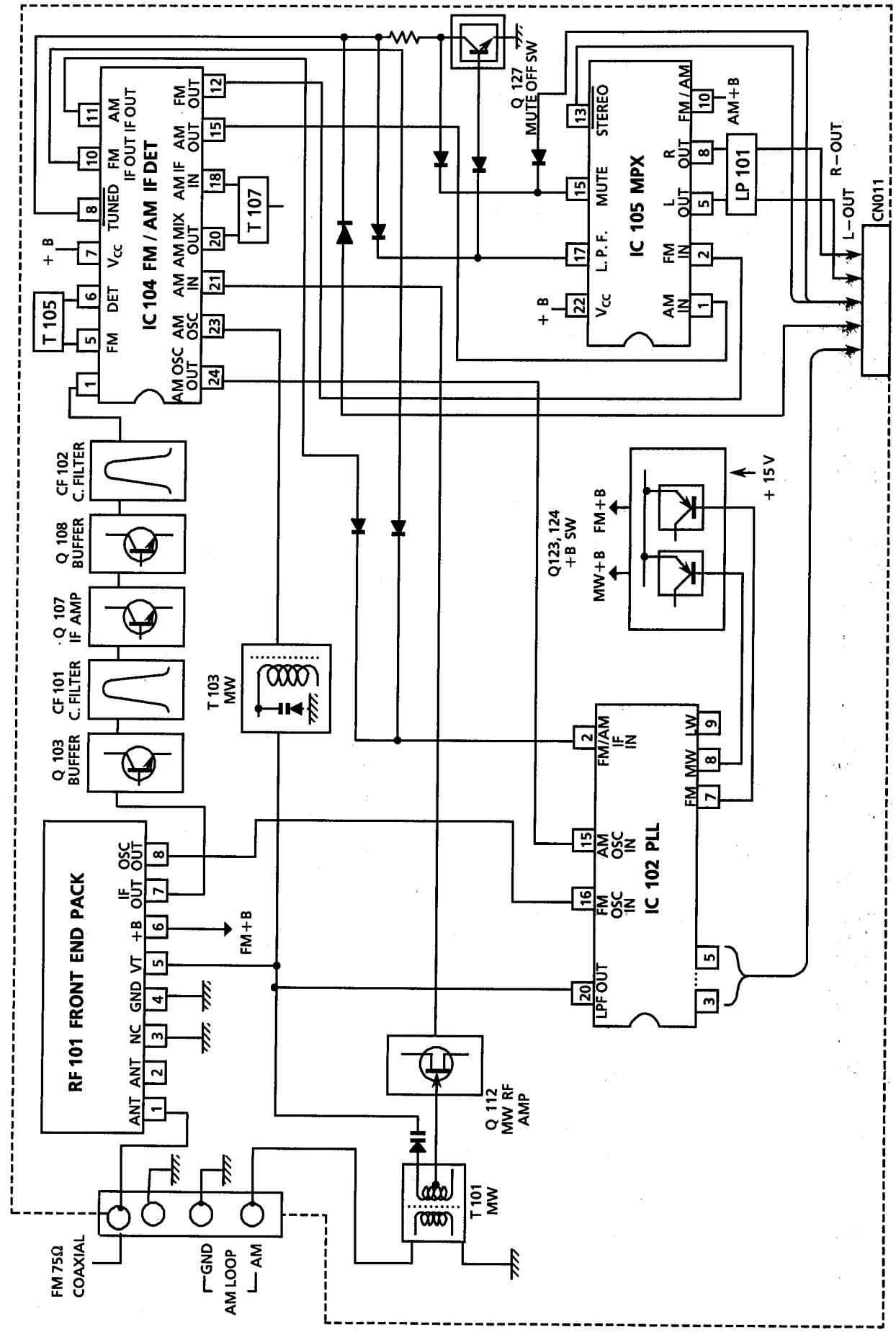
■ Idling current

(1) Set the volume control to minimum during this adjustment.
(2) Turn R791 and R792 fully counterclockwies to warm up befor adjustment.
If the heatsink is already warm from previous use the correct adjustment can not be made.
(3) Connect a DC voltmeter to R773 resistor's leads for left channel, or to R774 for right channel.
(4) Adjust R773 for left channel, or R774 for right channel, so that the DC voltmeter becomes 1mV~10mV.

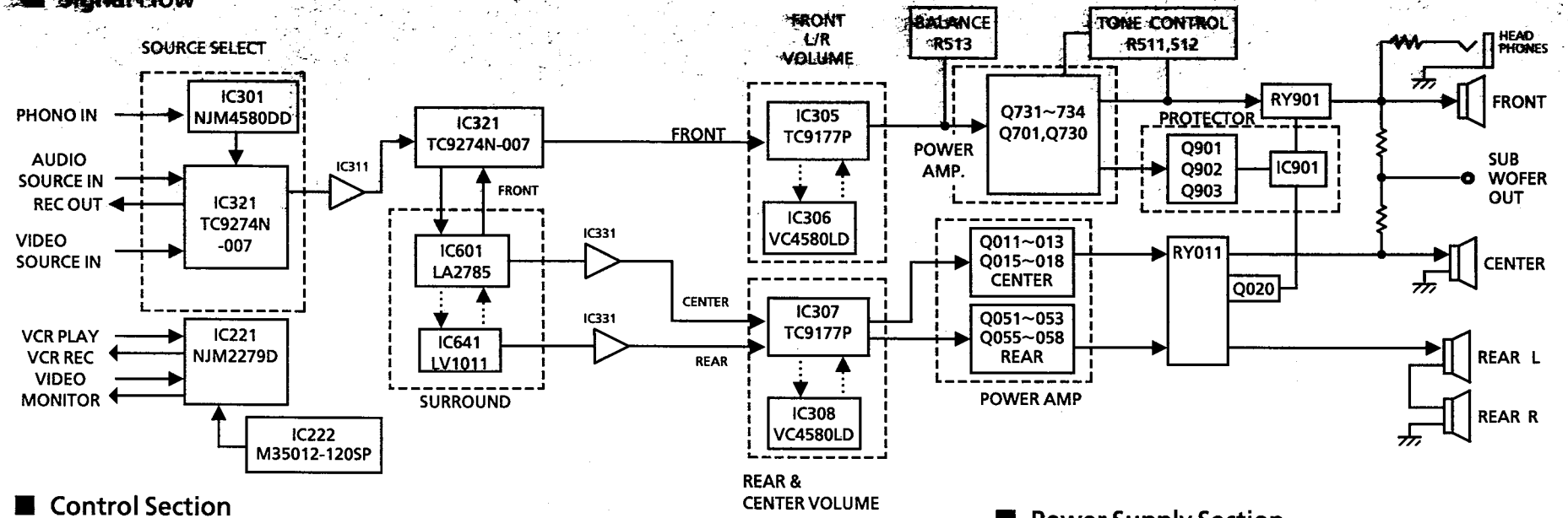
- MEMO -

Block Diagrams

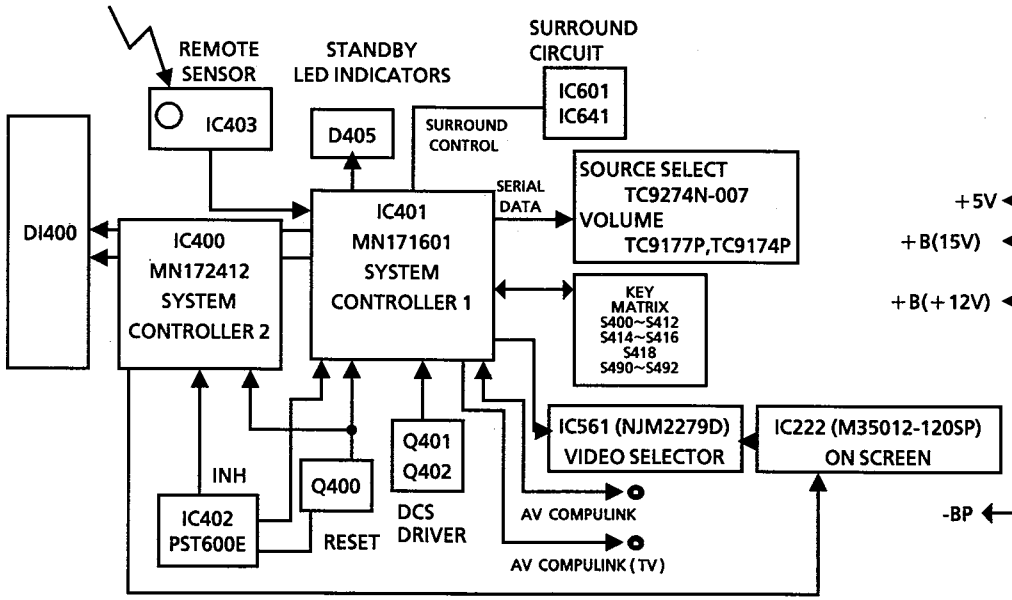
■ Tuner Section



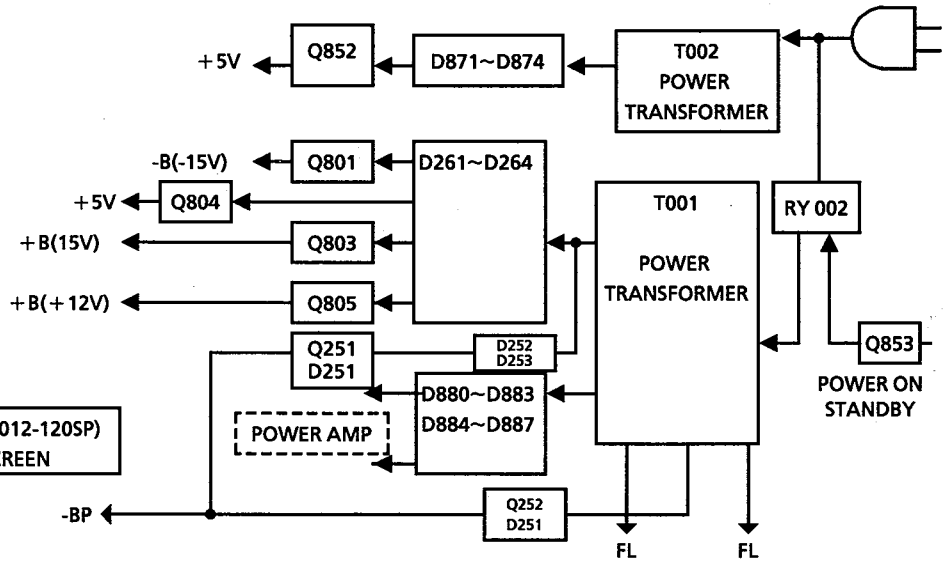
■ Signal Flow



■ Control Section

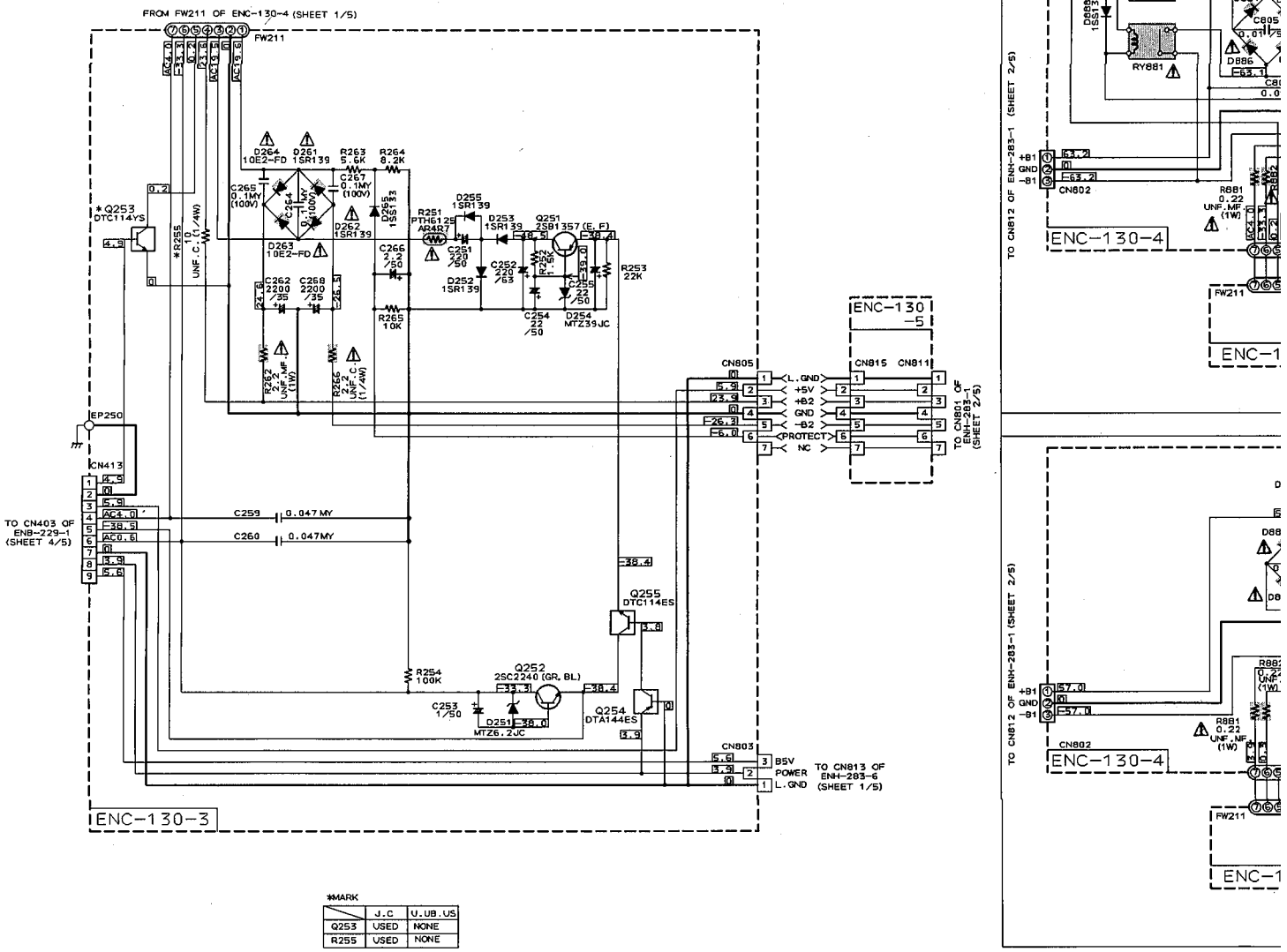


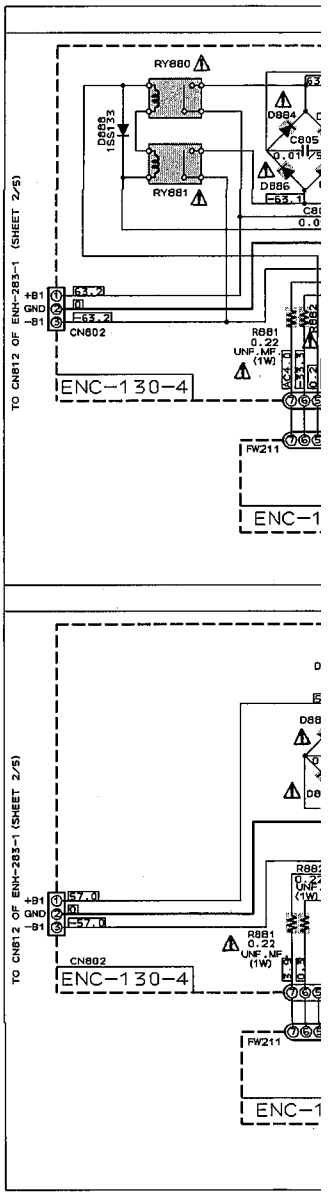
■ Power Supply Section



Schematic Diagrams

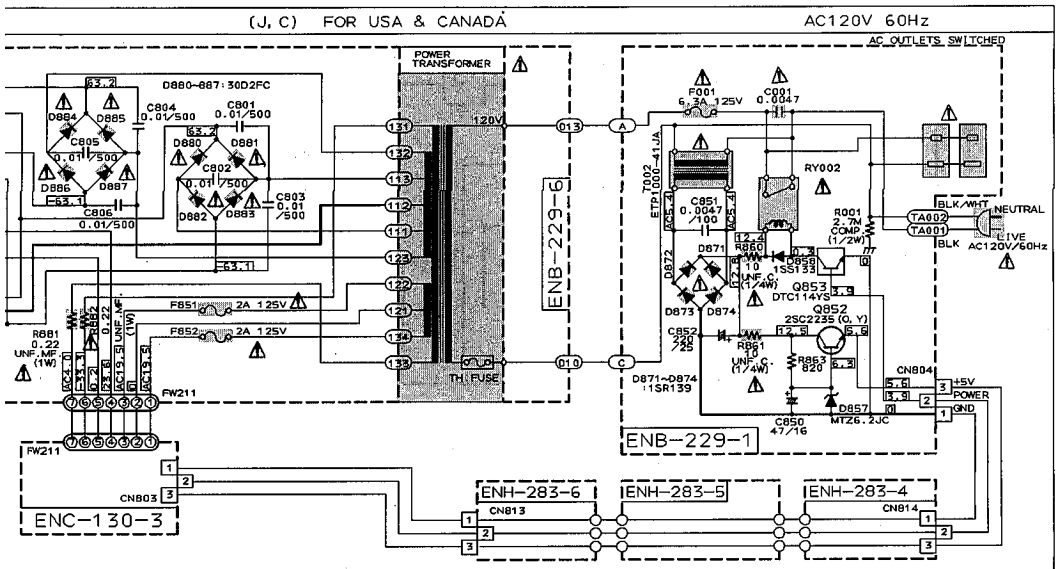
■ Power Supply Section





*MARK

	J.C	U.UB.US
Q253	USED	NONE
R255	USED	NONE

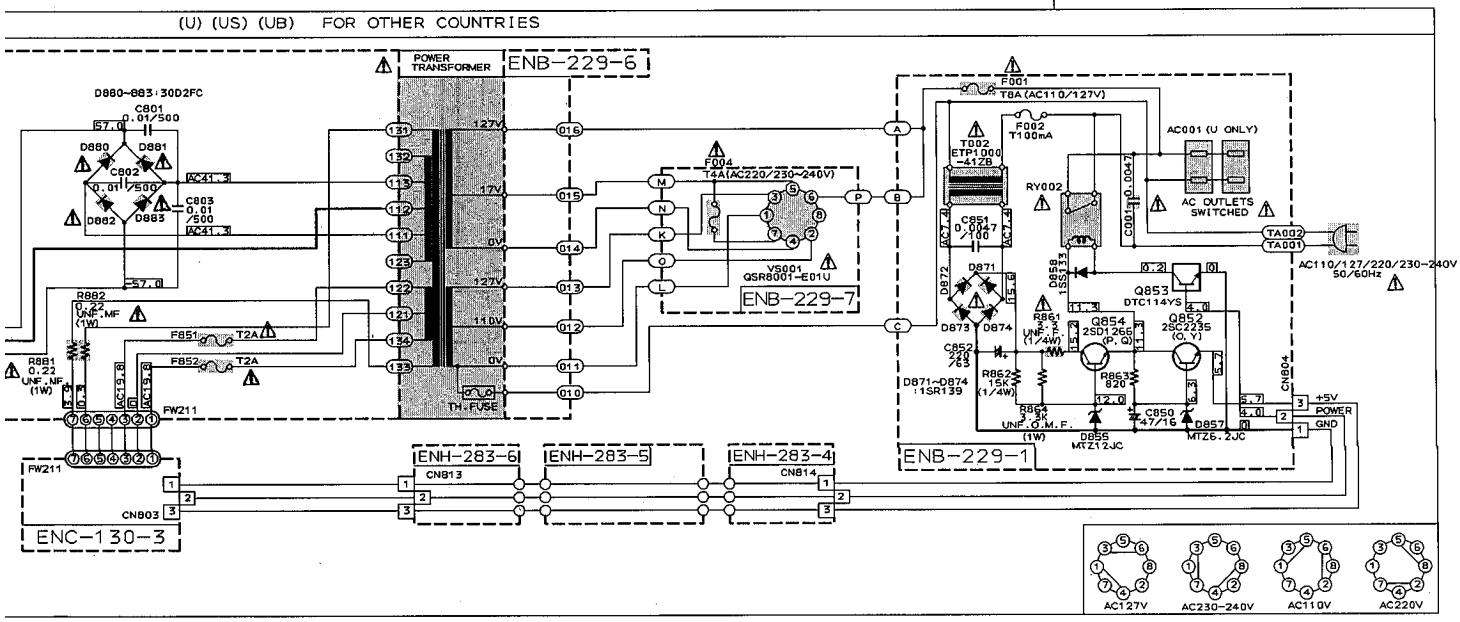


VERSION CODES

J : U.S.A.
C : CANADA
UB : HONG KONG
US : SINGAPORE
U : UNIVERSAL EXCEPT ALL ABOVE

NOTE :

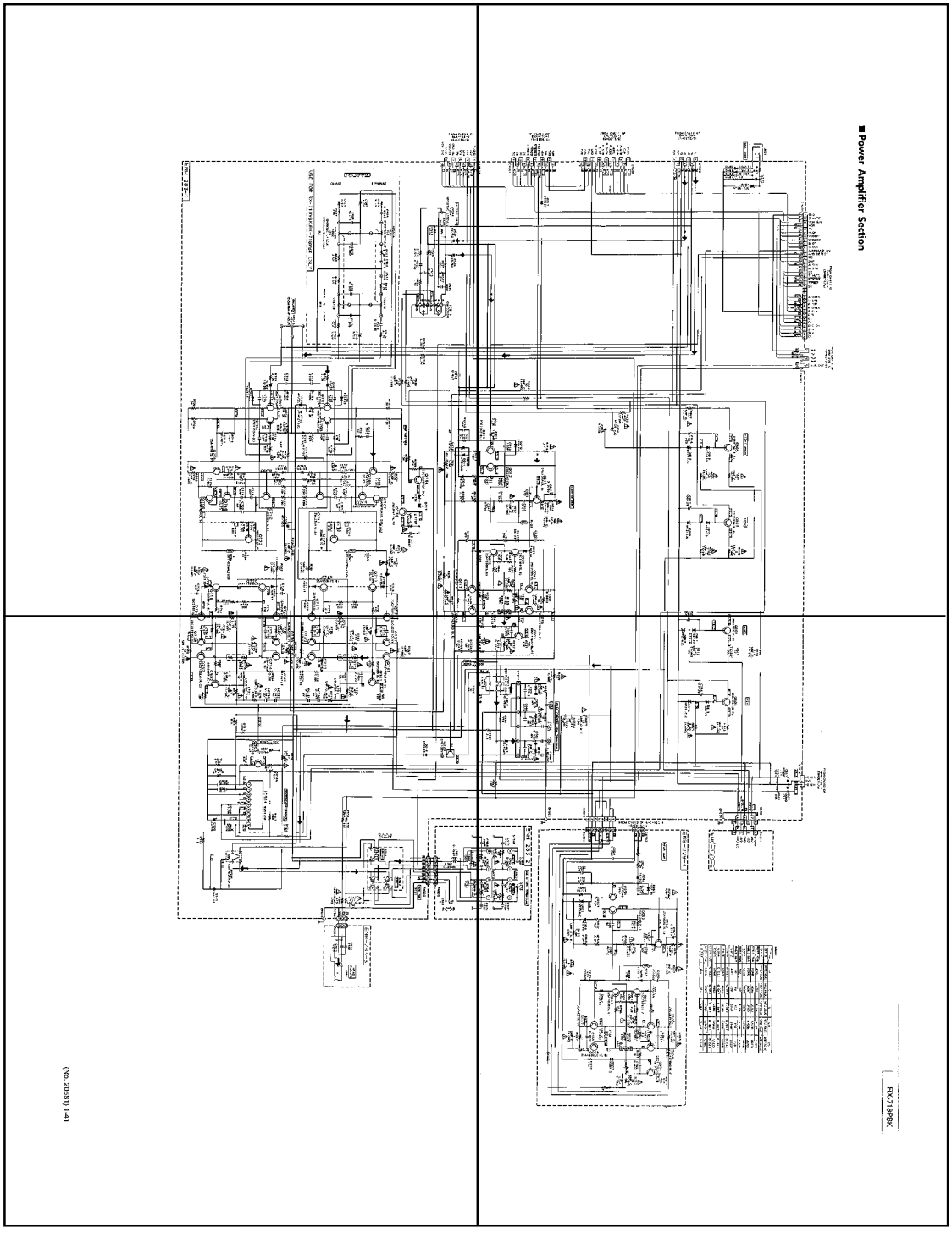
1. MARK (*) IS TO SHOW DEVIATION IN VERSIONS. DETAILS ARE EXPLAINED NEAR THE MARK.



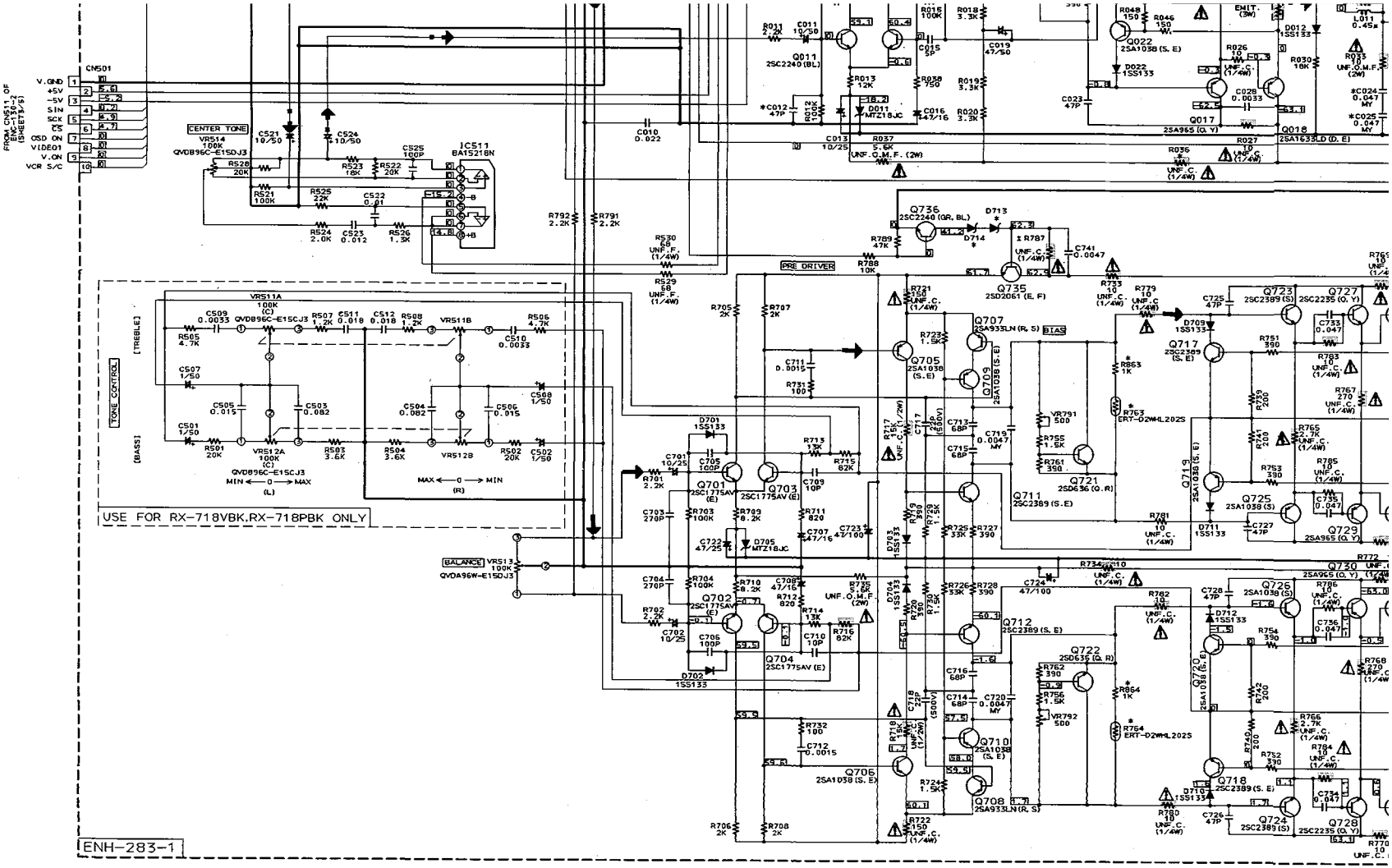
Notes:

1. ← indicates Main signal path.
2. ←- indicates CENTER signal path.
3. ⇐ indicates REAR signal path.
4. When replacing the parts in the darkened are (▩) and those marked with ⚠ ,be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram. The design and contents are subject to change withoutnotice.

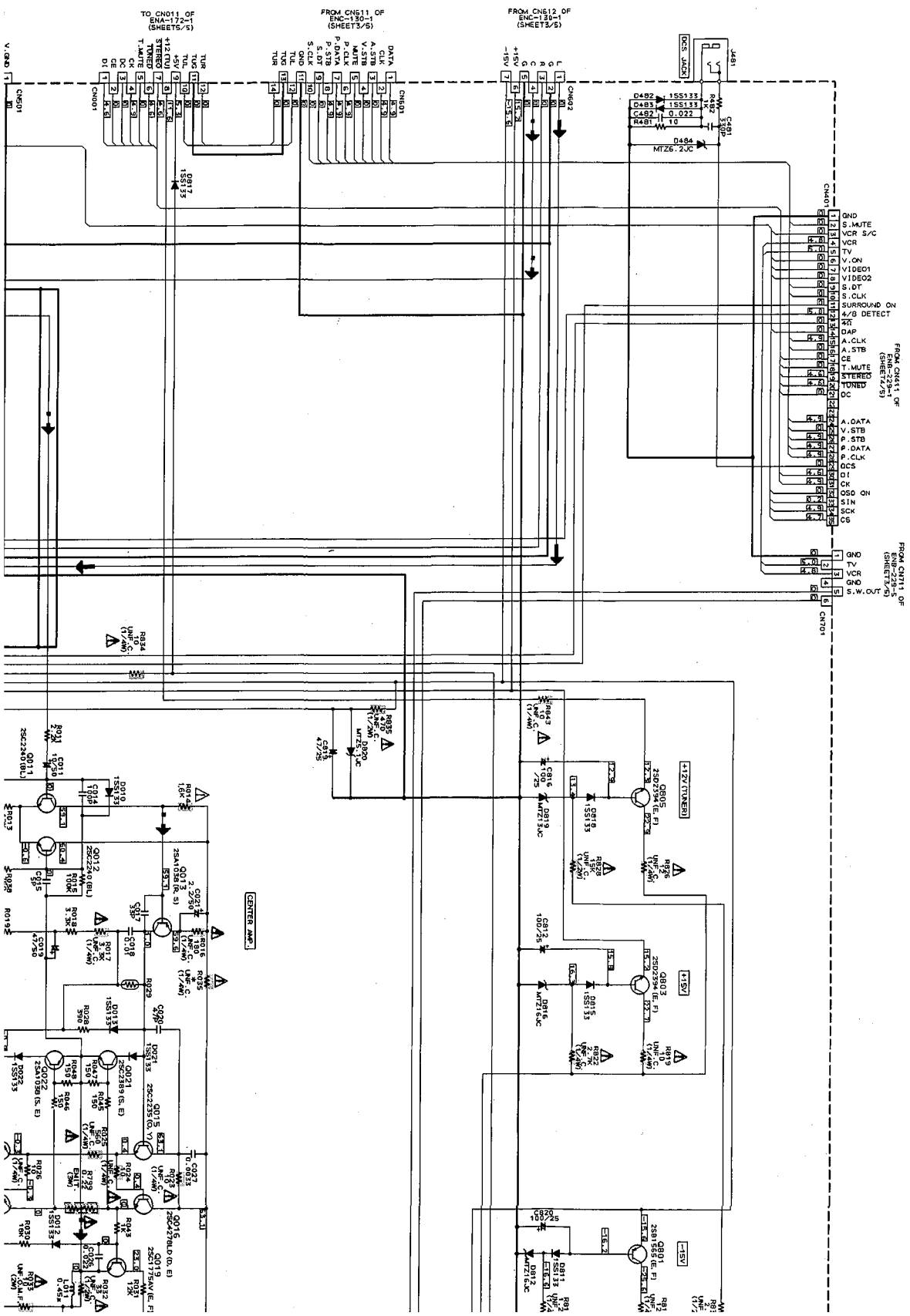
P1-41-a P1-41-b

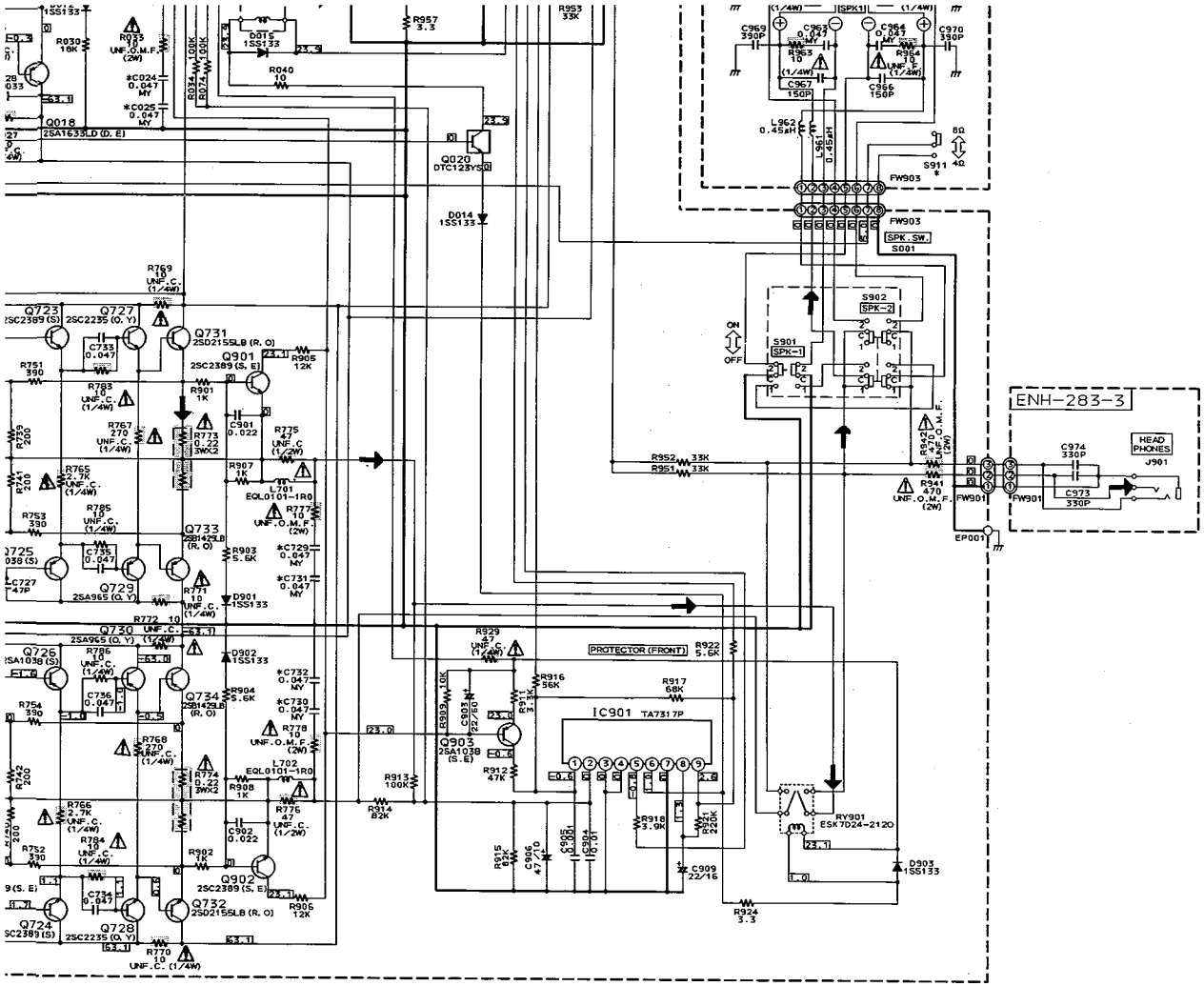


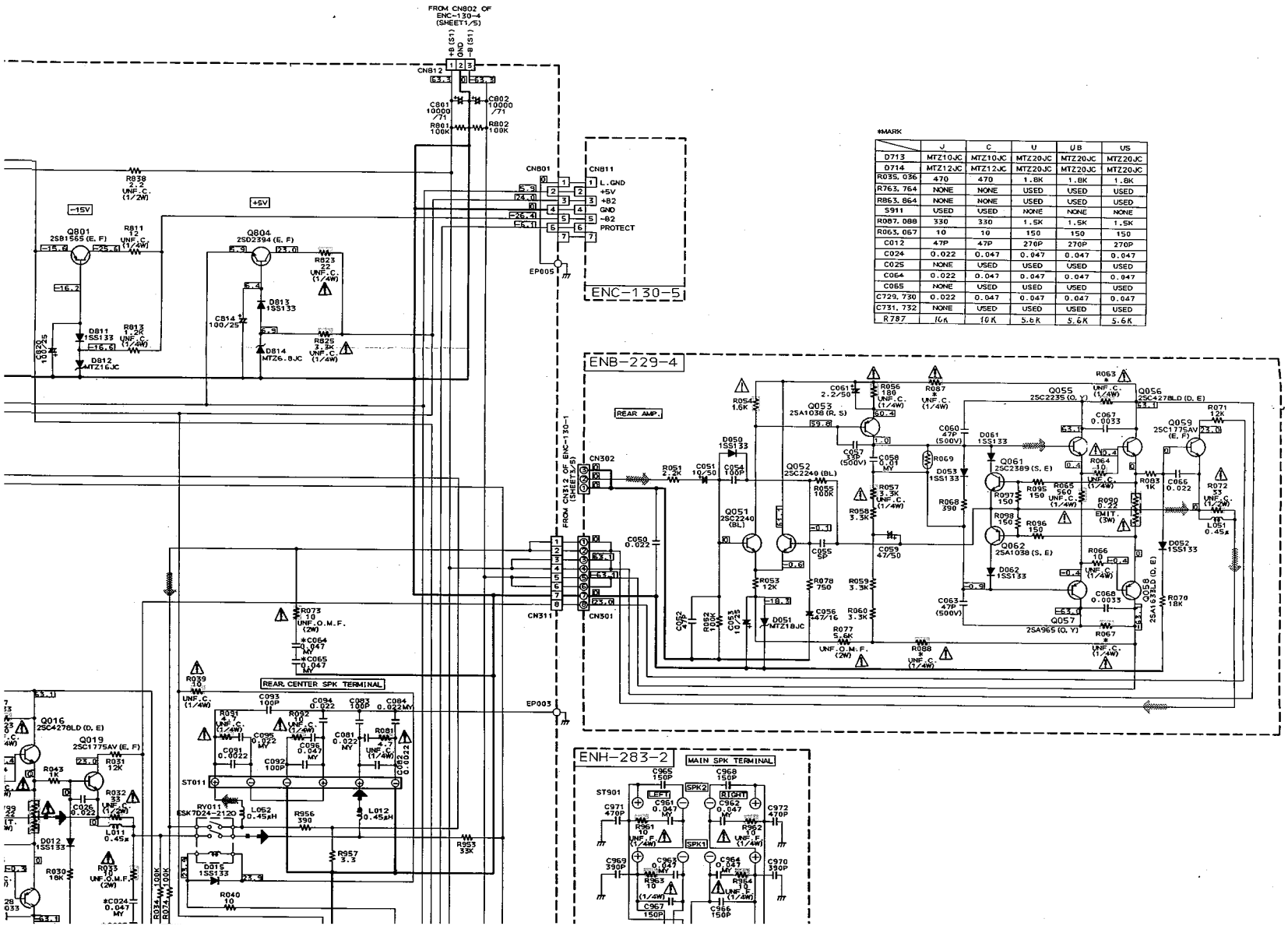
P1-41-c P1-41-d


CN501
V.GND
+5V
-5V
SIN
SCK
CS
OSD ON
VIDEO1
V.ON
VCR S/C
FROM CN511 OF (ENC-1350-2 (SHEET9/9))
CENTER TONE
VR514 100K QVD896C-E15DJ3
JC511 BA15218N
TONE CONTROL
[TREBLE]
[BASS]
VR511A 100K (C) QVD896C-E15CJ3
VR511B
VR512A 100K (C) QVD896C-E15CJ3
VR512B
MIN ← 0 → MAX
(L)
(R)
BALANCE VR513 100K QVDA96W-E15DJ3
USE FOR RX-718VBK,RX-718PBK ONLY
PRE DRIVER
BIAS
Q735 2SD2061 (E, F)
Q736 2SC2240 (GR, BL)
Q705 2SA1038 (S.E)
Q707 2SA933LN (R, S)
Q709 2SA1038 (S.E)
Q701 2SC1775AV (E)
Q703 2SC1775AV (E)
Q702 2SC1775AV (E)
Q704 2SC1775AV (E)
Q706 2SA1038 (S, E)
Q708 2SA933LN (R, S)
Q710 2SA1038 (S, E)
Q712 2SC2389 (S, E)
Q721 2SD636 (Q, R)
Q722 2SD636 (Q, R)
Q711 2SC2389 (S.E)
Q717 2SC2389 (S, E)
Q718 2SC2389 (S, E)
Q719 2SA1038 (S, E)
Q720 2SA1038 (S, E)
Q723 2SC2389 (S)
Q724 2SC2389 (S)
Q725 2SA1038 (S)
Q726 2SA1038 (S)
Q727 2SC2235 (Q, Y)
Q728 2SC2235 (Q, Y)
Q729 2SA965 (Q, Y)
Q730 2SA965 (Q, Y)
ENH-283-1

■ Power Amplifier Section



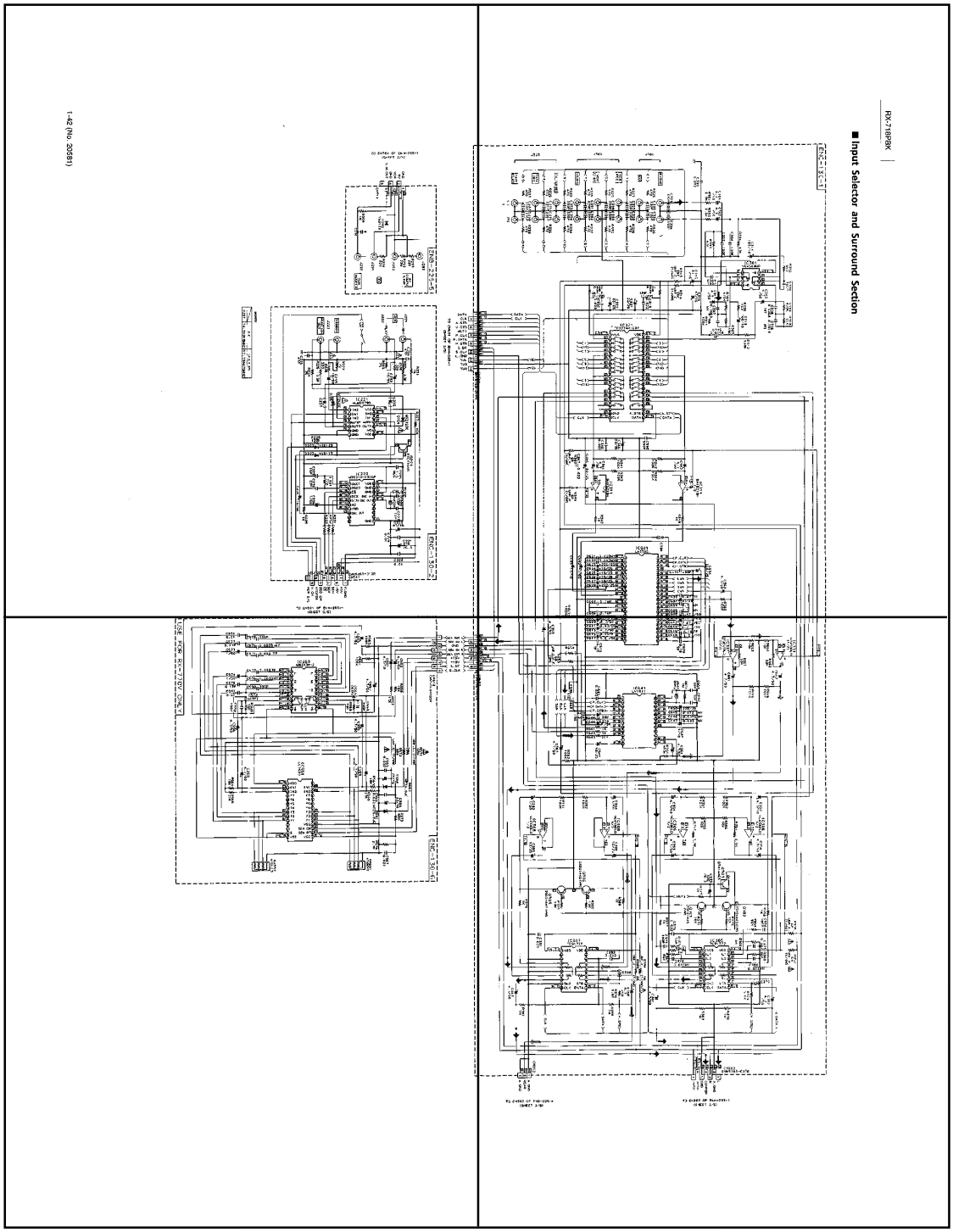

ENH-283-3
HEAD PHONES
J901
IC901 TA7317P
PROTECTOR (FRONT)
SPK. SW.
S001
S902
SPK-2
S901
SPK-1
ON
OFF
FW903
FW901
EP001
RY901
ESK7D24-2120
Q018
2SA1633LD (D, E)
Q020
DTC123YS
Q723
Q727
Q731
2SD2155LB (R, O)
Q901
2SC2389 (S, E)
Q733
2SB1429LB (R, O)
Q729
2SA965 (O, Y)
Q730
Q726
2SA1038 (S)
Q734
2SB1429LB (R, O)
Q903
2SA1038 (S, E)
Q902
2SC2389 (S, E)
Q732
2SD2155LB (R, O)
Q724
2SC2389 (S)
Q728
2SC2235 (O, Y)
D014
1SS133
D015
1SS133
D901
1SS133
D902
1SS133
D903
1SS133
L701
EQL0101-1R0
L702
EQL0101-1R0
L962
0.45μH
L961
0.45μH
S911
8Ω
4Ω



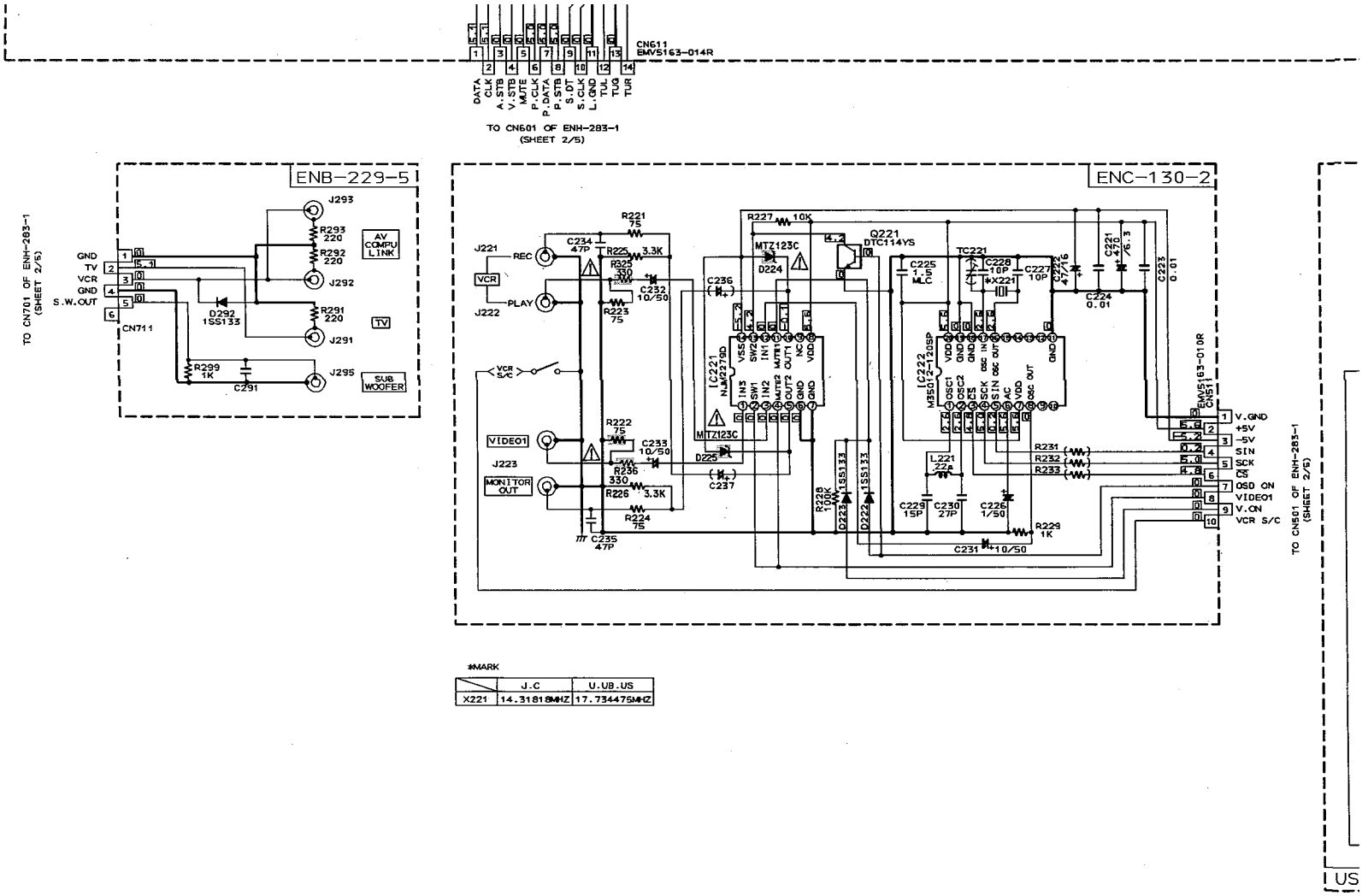
*MARK

	J	C	U	UB	US
D713	MTZ10JC	MTZ10JC	MTZ20JC	MTZ20JC	MTZ20JC
D714	MTZ12JC	MTZ12JC	MTZ20JC	MTZ20JC	MTZ20JC
R035, 036	470	470	1.8K	1.8K	1.8K
R763, 764	NONE	NONE	USED	USED	USED
R863, 864	NONE	NONE	USED	USED	USED
S911	USED	USED	NONE	NONE	NONE
R087, 088	330	330	1.5K	1.5K	1.5K
R063, 057	10	10	150	150	150
C012	47P	47P	270P	270P	270P
C024	0.022	0.047	0.047	0.047	0.047
C025	NONE	USED	USED	USED	USED
C064	0.022	0.047	0.047	0.047	0.047
C065	NONE	USED	USED	USED	USED
C729, 730	0.022	0.047	0.047	0.047	0.047
C731, 732	NONE	USED	USED	USED	USED
R787	10K	10K	5.6K	5.6K	5.6K

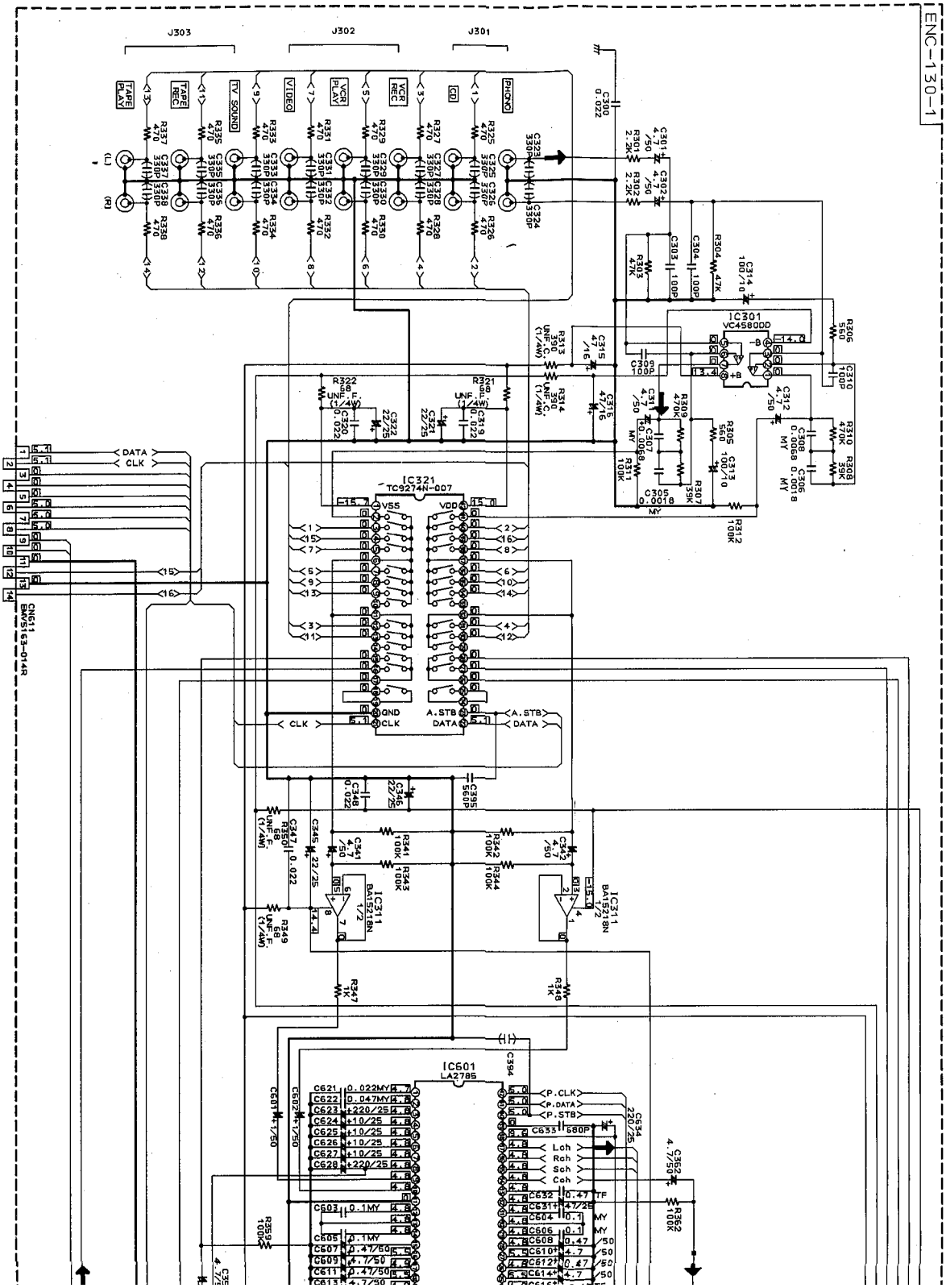
P1-42-a P1-42-b

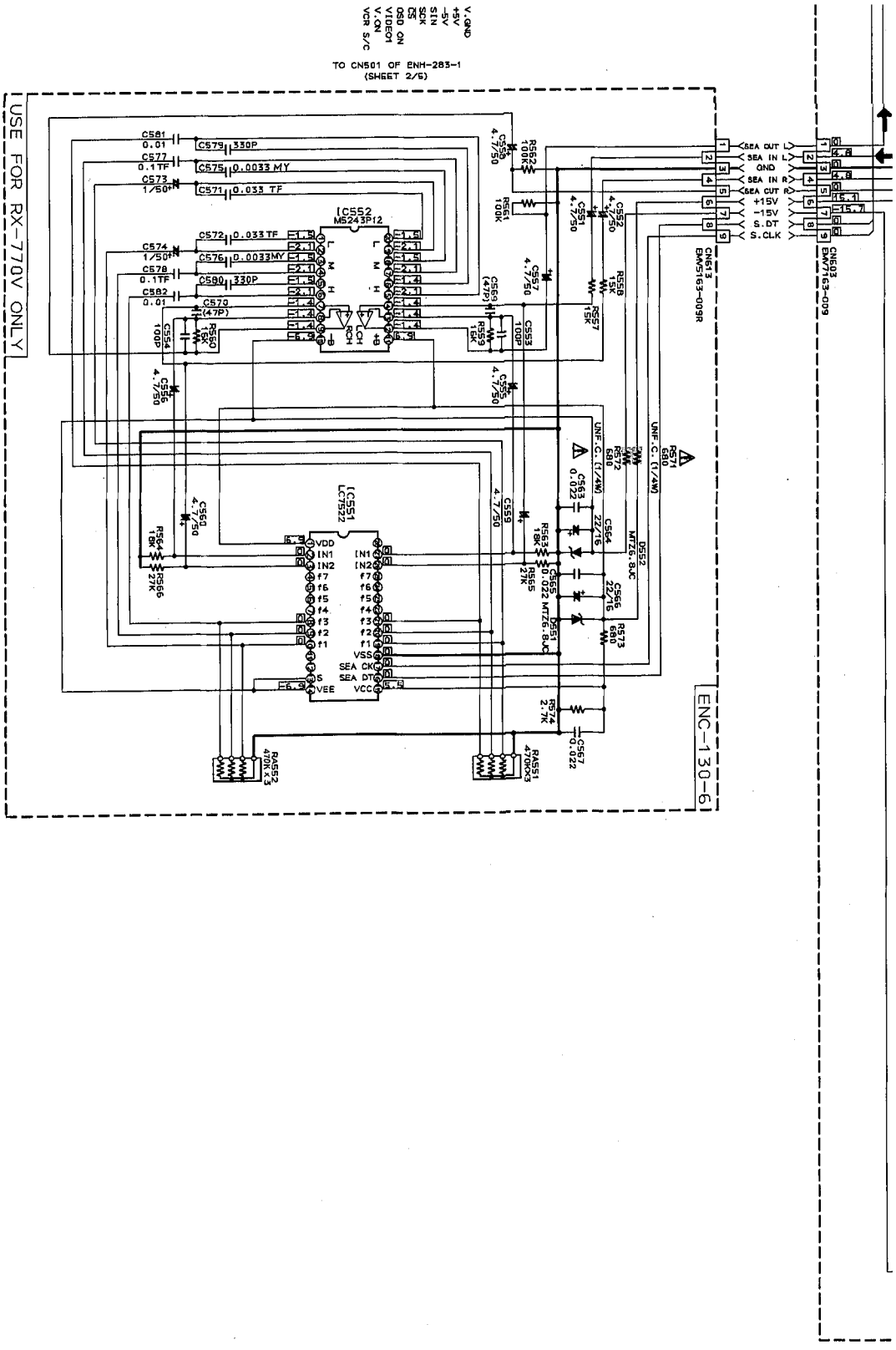


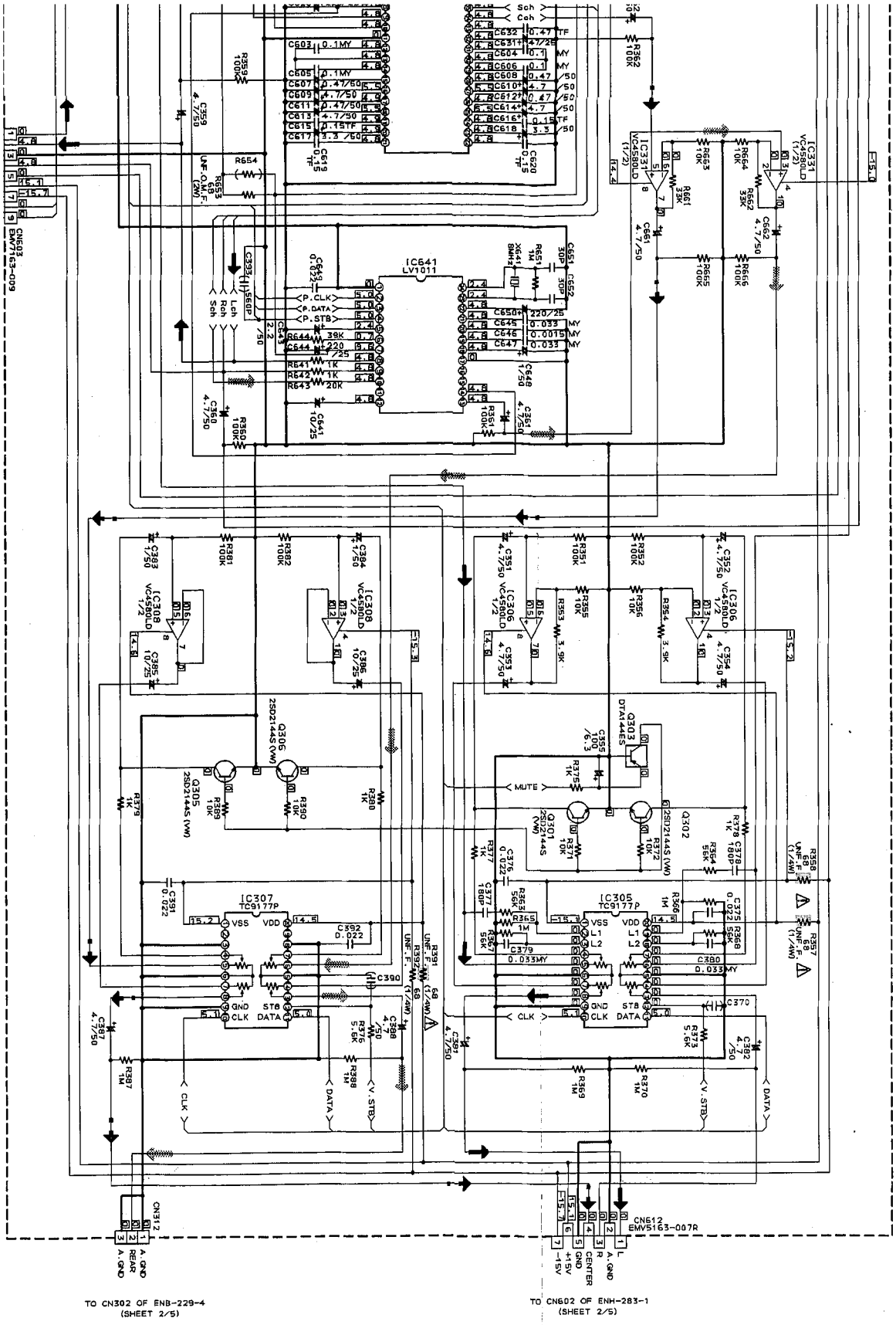
P1-42-c P1-42-d


CN611
EMV5163-014R
DATA
CLK
A.STB
V.STB
MUTE
P.CLK
P.DATA
P.STB
S.CLK
S.DT
L.GND
TUL
TUG
TUR
TO CN601 OF ENH-283-1
(SHEET 2/5)
ENB-229-5
TO CN701 OF ENH-283-1
(SHEET 2/5)
GND
TV
VCR
GND
S.W.OUT
CN711
D292
1SS133
R299
1K
C291
J293
R293
220
R292
220
J292
R291
220
J291
J295
AV COMPU LINK
TV
SUB WOOFER
ENC-130-2
J221
REC
VCR
PLAY
J222
VCR S/C
VIDEO1
J223
MONITOR OUT
R221
75
C234
47P
R225
3.3K
R325
330
C232
10/50
R223
75
R222
75
C233
10/50
R236
330
R226
3.3K
R224
75
C235
47P
R227
10K
MTZ123C
D224
Q221
DTC114YS
C236
C237
IC221
NJM2279D
MTZJ123C
D225
1SS133
D223
1SS133
R228
100K
IC222
M35012-120SP
TC221
X221
C225
1
MLC
C228
10P
C227
10P
C224
0.01
C223
0.01
C221
470
6.3
C226
47
C229
15P
C230
27P
C226
1/50
L221
22
R231
R232
R233
R229
1K
C231
10/50
EMV5163-010R
CN511
1 V.GND
2 +5V
3 -5V
4 SIN
5 SCK
6 CS
7 OSD ON
8 VIDEO1
9 V.ON
10 VCR S/C
TO CN501 OF ENH-283-1
(SHEET 2/5)
*MARK
J.C
U.UB.US
X221
14.31818MHZ
17.734475MHZ

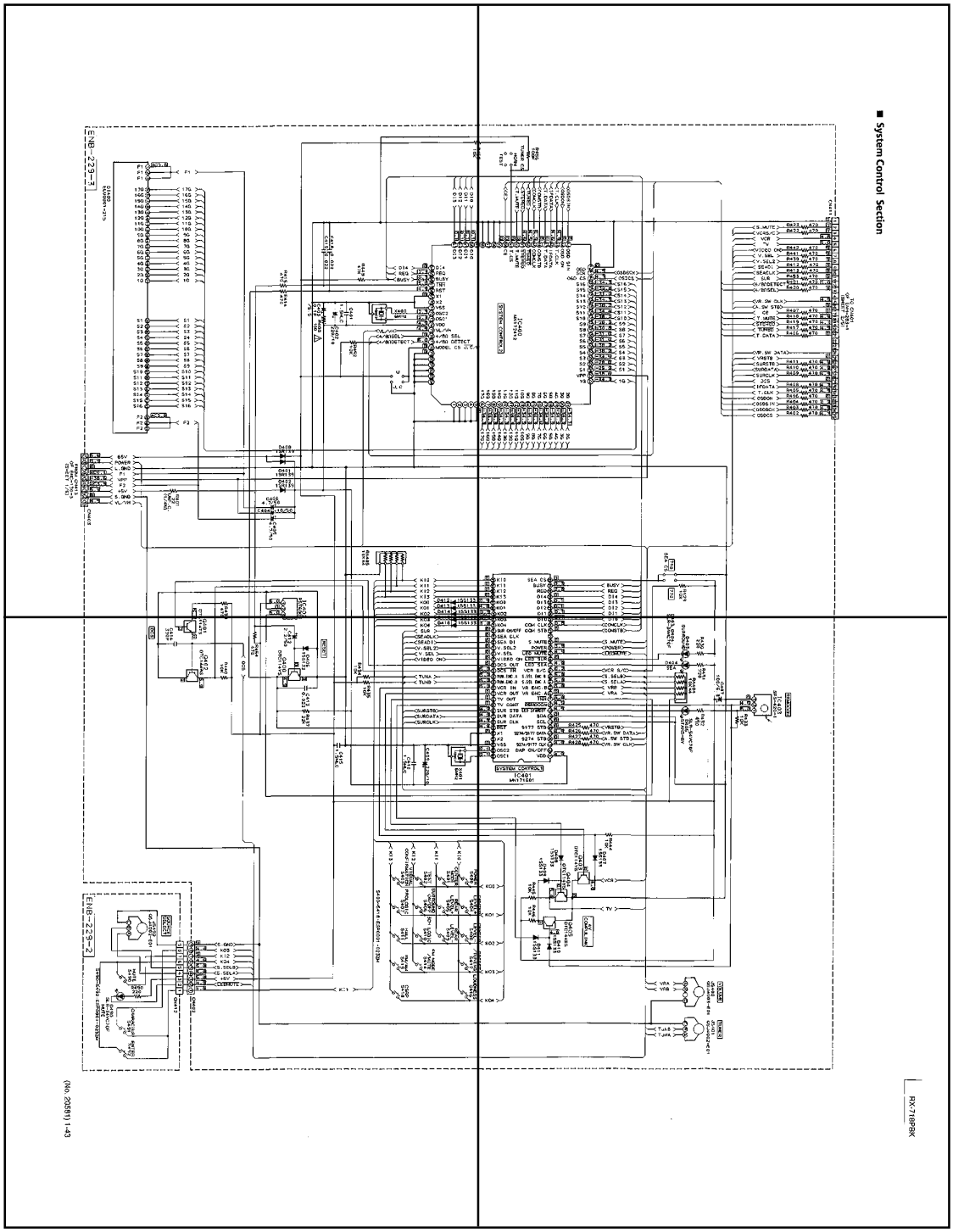
■ Input Selector and Surround Section



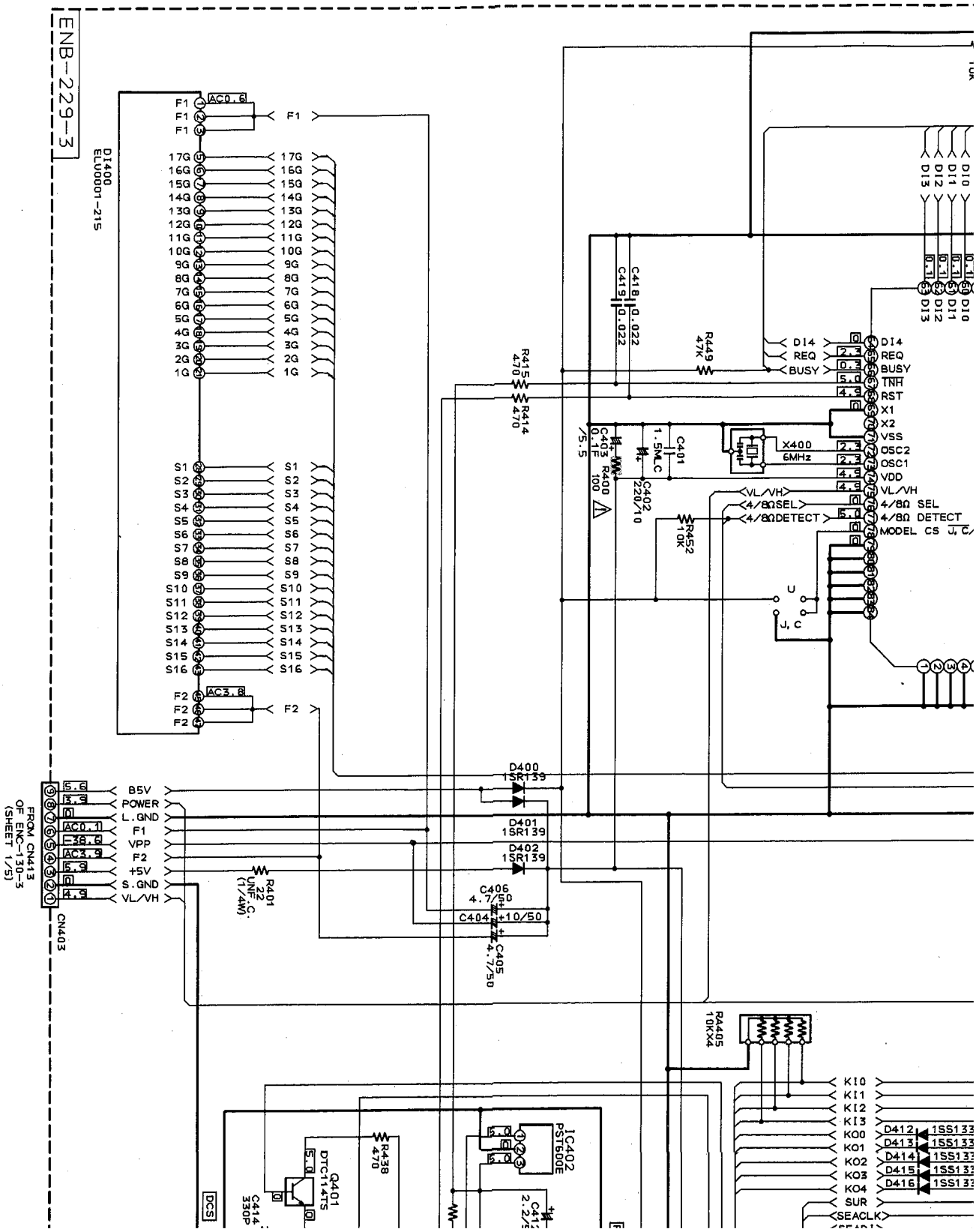

TO CN501 OF ENH-283-1
(SHEET 2/5)
V.GND
+5V
-5V
SIN
SCK
CS
OSD ON
V.IDENT
V.ON
VCR S/C
USE FOR RX-770V ONLY
ENC-130-6
IC552
MS243P12
IC551
LC7522
SEA OUT
SEA IN L
GND
SEA IN R
SEA CUT
+15V
-15V
S.DT
S.CLK
CN613
EAM5163-009R
CN603
EAM5163-009
UNF-C. (1/4W)
D552
MTZ6.8JC
D551
MTZ6.8JC

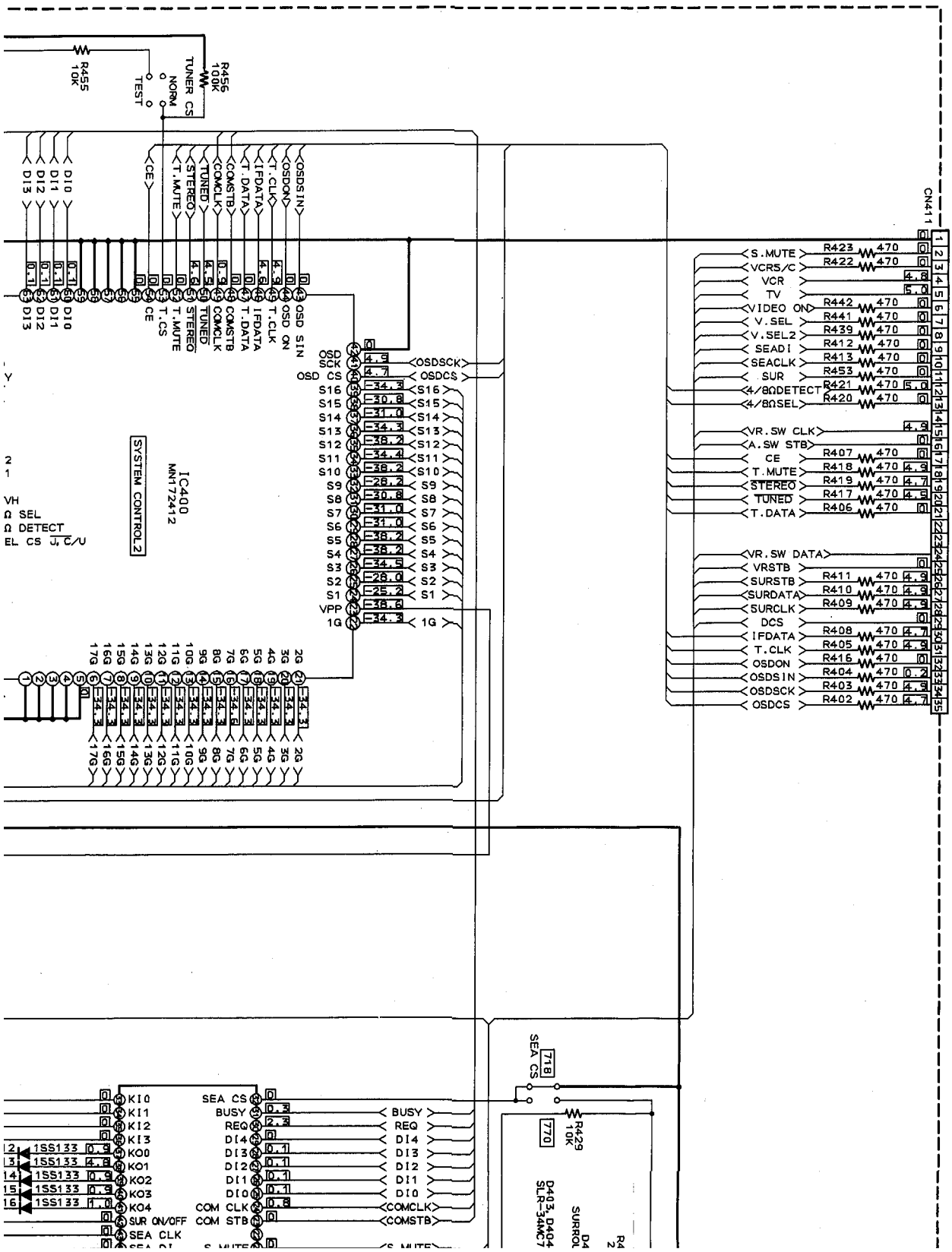

IC641
LV011
IC307
TC9177P
IC305
TC9177P
Q305
2SD2144S (VW)
Q306
2SD2144S (VW)
Q301
2SD2144S (VW)
Q302
2SD2144S (VW)
Q303
DTA144ES
CN603
EMV7163-009
CN312
CN612
EMV5163-007R
TO CN302 OF ENB-229-4
(SHEET 2/5)
TO CN602 OF ENH-283-1
(SHEET 2/5)

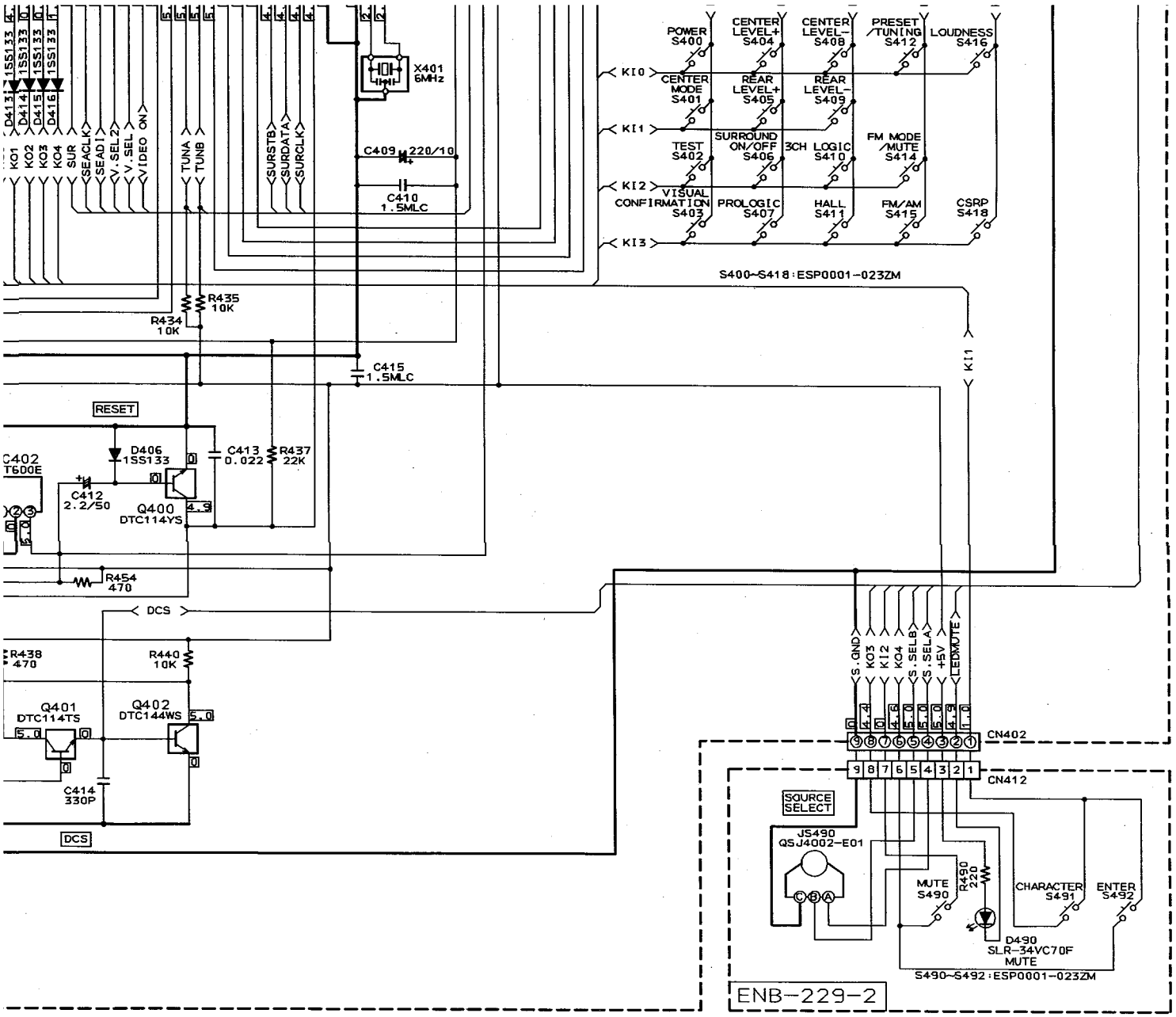
P1-43-a P1-43-b

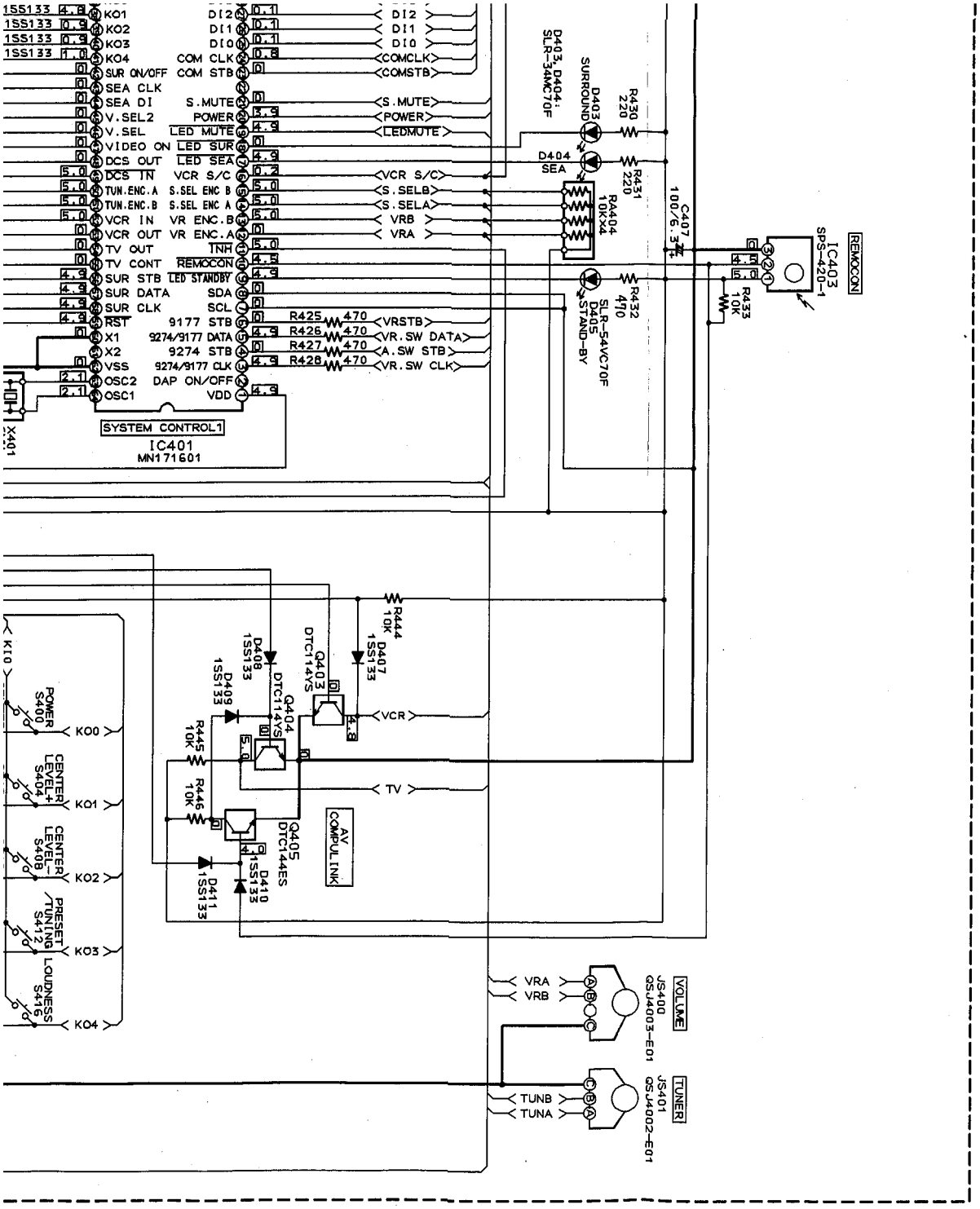


P1-43-c P1-43-d

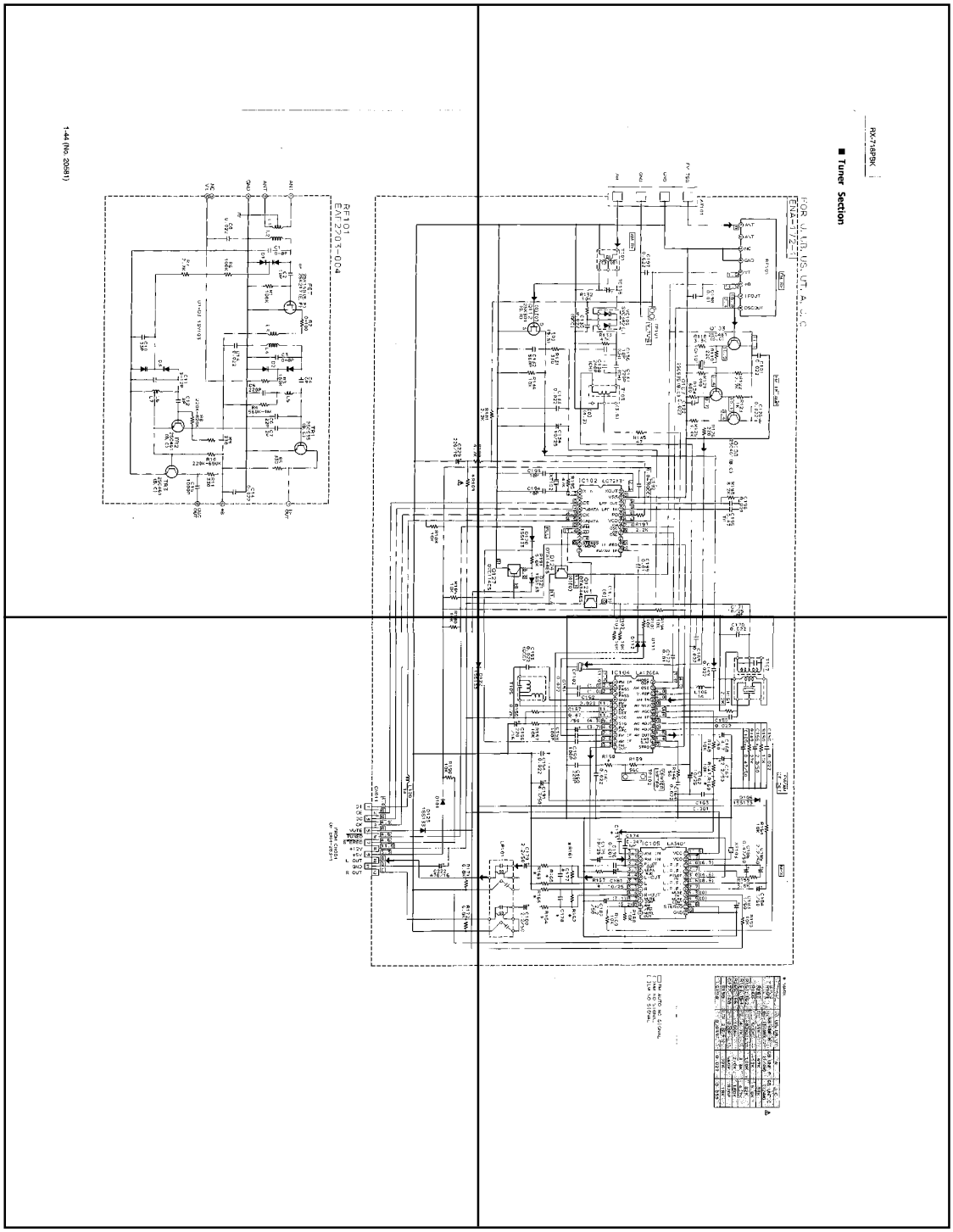

ENB-229-3
DI400
ELU0001-215
CN403
FROM CN413
OF ENC-130-3
(SHEET 1/5)
B5V
POWER
L.GND
F1
VPP
F2
+5V
S.GND
VL/VH
D400
1SR139
D401
1SR139
D402
1SR139
R401
22
UNF.C.
(1/4W)
C406
4.7/50
C404
+10/50
C405
4.7/50
R415
470
R414
470
C418
0.022
C419
0.022
R449
47K
C403
0.1F
R400
100
C401
1.5MLC
C402
220/10
X400
6MHz
R452
10K
DI4
REQ
BUSY
TNH
RST
X1
X2
VSS
OSC2
OSC1
VDD
VL/VH
4/8Ω SEL
4/8Ω DETECT
MODEL CS
RA405
10KX4
KI0
KI1
KI2
KI3
KO0
KO1
KO2
KO3
KO4
SUR
SEACLK
D412
D413
D414
D415
D416
1SS133
IC402
PST600E
Q401
DTC114TS
R438
470
C414
330P
DCS


R455 10K
TEST
NORM
TUNER CS
R456 100K 1W
CN411
TO CN401 OF ENH-283-1 (SHEET 2/5)
S.MUTE
VCRS/C
VCR
TV
VIDEO ON
V.SEL
V.SEL2
SEADI
SEACLK
SUR
4/8ΩDETECT
4/8ΩSEL
VR.SW CLK
A.SW STB
CE
T.MUTE
STEREO
TUNED
T.DATA
VR.SW DATA
VRSTB
SURSTB
SURDATA
SURCLK
DCS
IFDATA
T.CLK
OSDON
OSDSIN
OSDSCK
OSDCS
IC400 MN172412
SYSTEM CONTROL2
OSD SCK
OSD CS
VPP
1G
718 SEA CS
770
R429 10K
BUSY
REQ
COM CLK
COM STB
SEA CLK
SUR ON/OFF
1SS133
D403, D404 SLR-34MC7

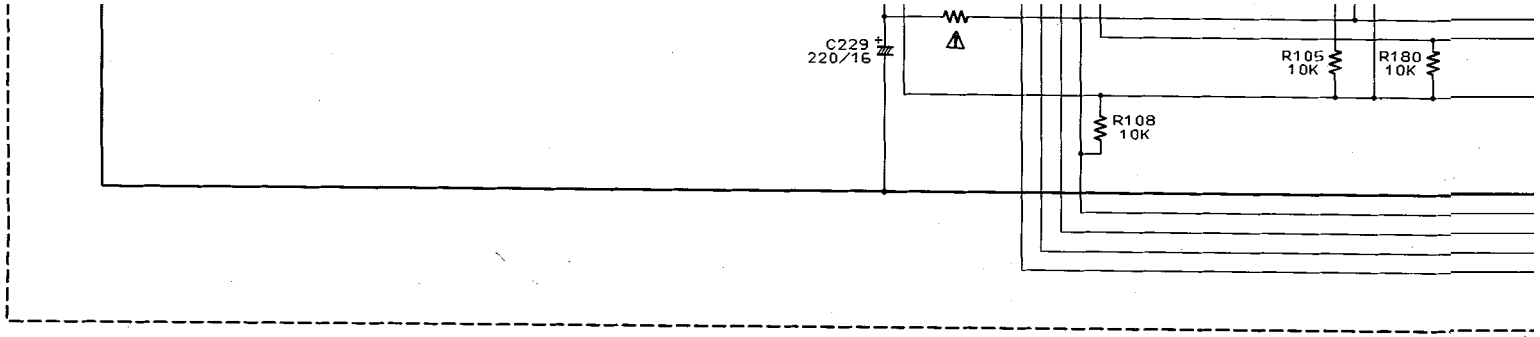

POWER S400
CENTER LEVEL+ S404
CENTER LEVEL- S408
PRESET /TUNING S412
LOUDNESS S416
CENTER MODE S401
REAR LEVEL+ S405
REAR LEVEL- S409
TEST S402
SURROUND ON/OFF S406
3CH LOGIC S410
FM MODE /MUTE S414
VISUAL CONFIRMATION S403
PROLOGIC S407
HALL S411
FM/AM S415
CSRP S418
KI0
KI1
KI2
KI3
S400~S418:ESP0001-023ZM
X401 6MHz
C409 220/10
C410 1.5MLC
C415 1.5MLC
R435 10K
R434 10K
RESET
D406 1SS133
C413 0.022
R437 22K
C412 2.2/50
Q400 DTC114YS
R454 470
DCS
R438 470
R440 10K
Q401 DTC114TS
Q402 DTC144WS
C414 330P
S.GND
KO3
KI2
KO4
S.SELB
S.SELA
+5V
LEDMUTE
CN402
CN412
SOURCE SELECT
JS490 QSJ4002-E01
MUTE S490
R490 220
CHARACTER S491
ENTER S492
D490 SLR-34VC70F MUTE
S490~S492:ESP0001-023ZM
ENB-229-2


SYSTEM CONTROL1
IC401
MN171601
REMOCON
IC403
SPS-420-1
D403, D404: SLR-34MC70F
D405 SLR-54VC70F
R430 220
R431 220
R432 470
R433 10K
R4404 10KX4
C407 100/6.3
R425 470
R426 470
R427 470
R428 470
R444 10K
R445 10K
R446 10K
D407 1SS133
D408 1SS133
D409 1SS133
D410 1SS133
D411 1SS133
Q403 DTC114YS
Q404 DTC114YS
Q405 DTC144ES
AV COMPULINK
POWER S400
CENTER LEVEL+ S404
CENTER LEVEL- S408
PRESET TUNING S412
LOUDNESS S416
VOLUME
JS400 QSJ4003-E01
TUNER
JS401 QSJ4002-E01

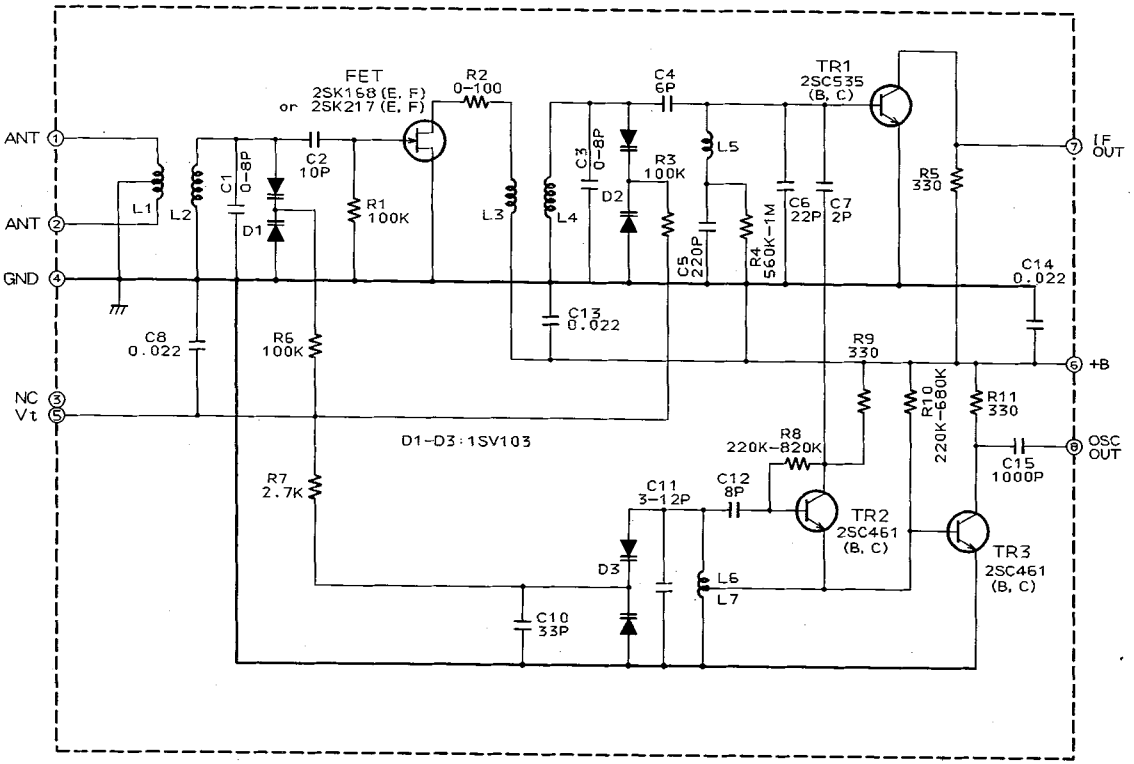
P1-44-a P1-44-b



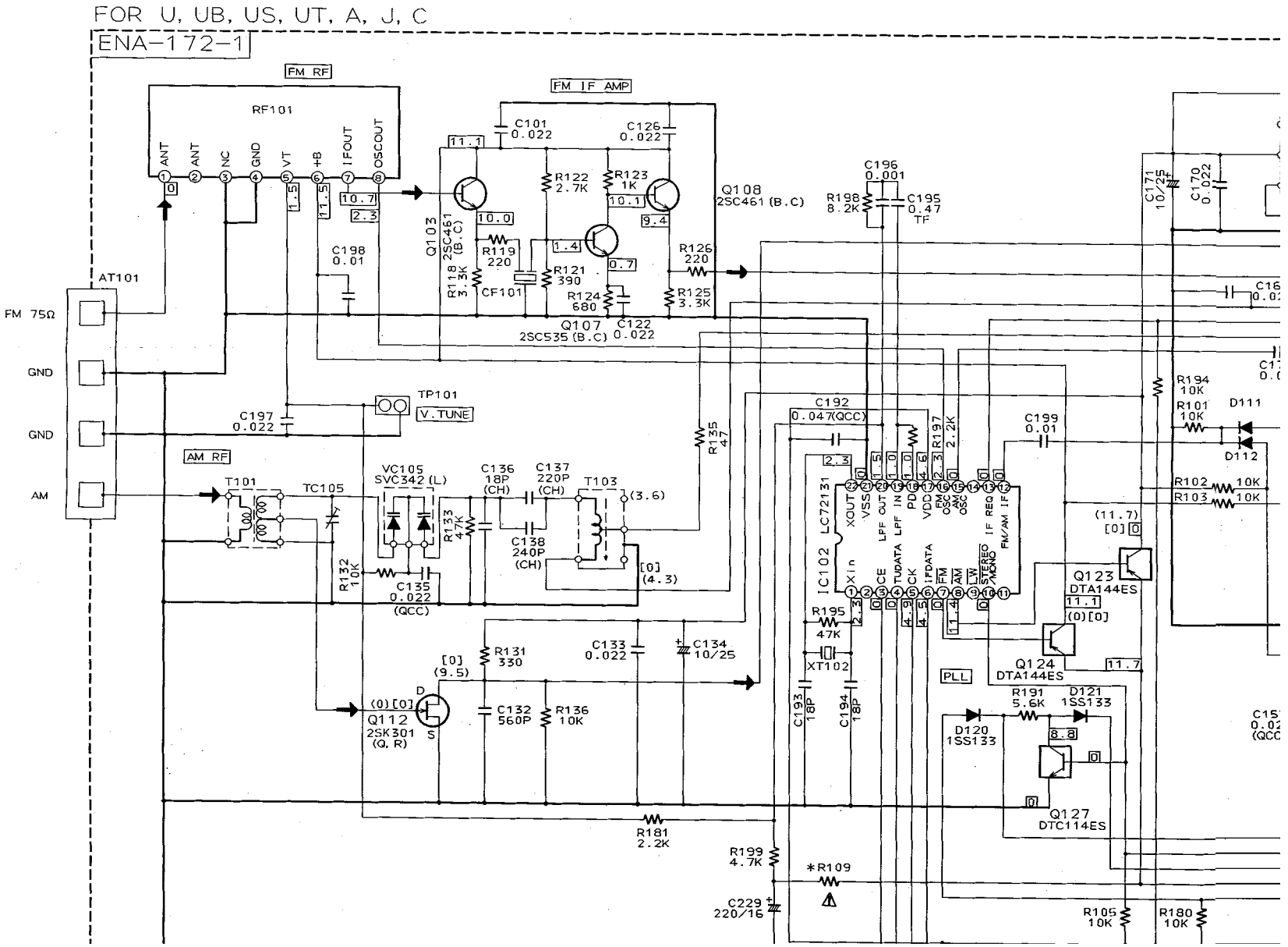
P1-44-c P1-44-d

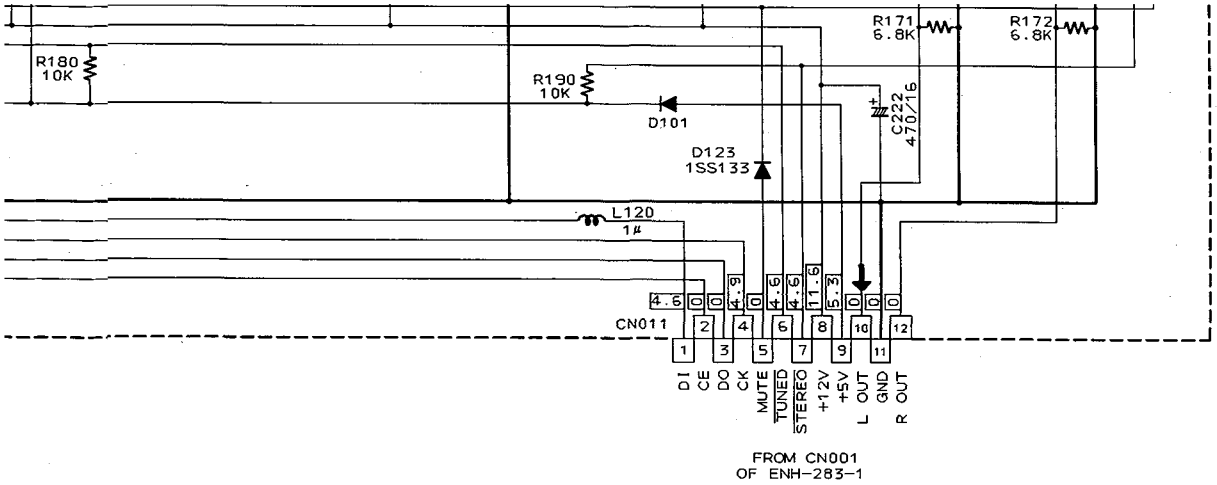


RF101
EAF2203-004

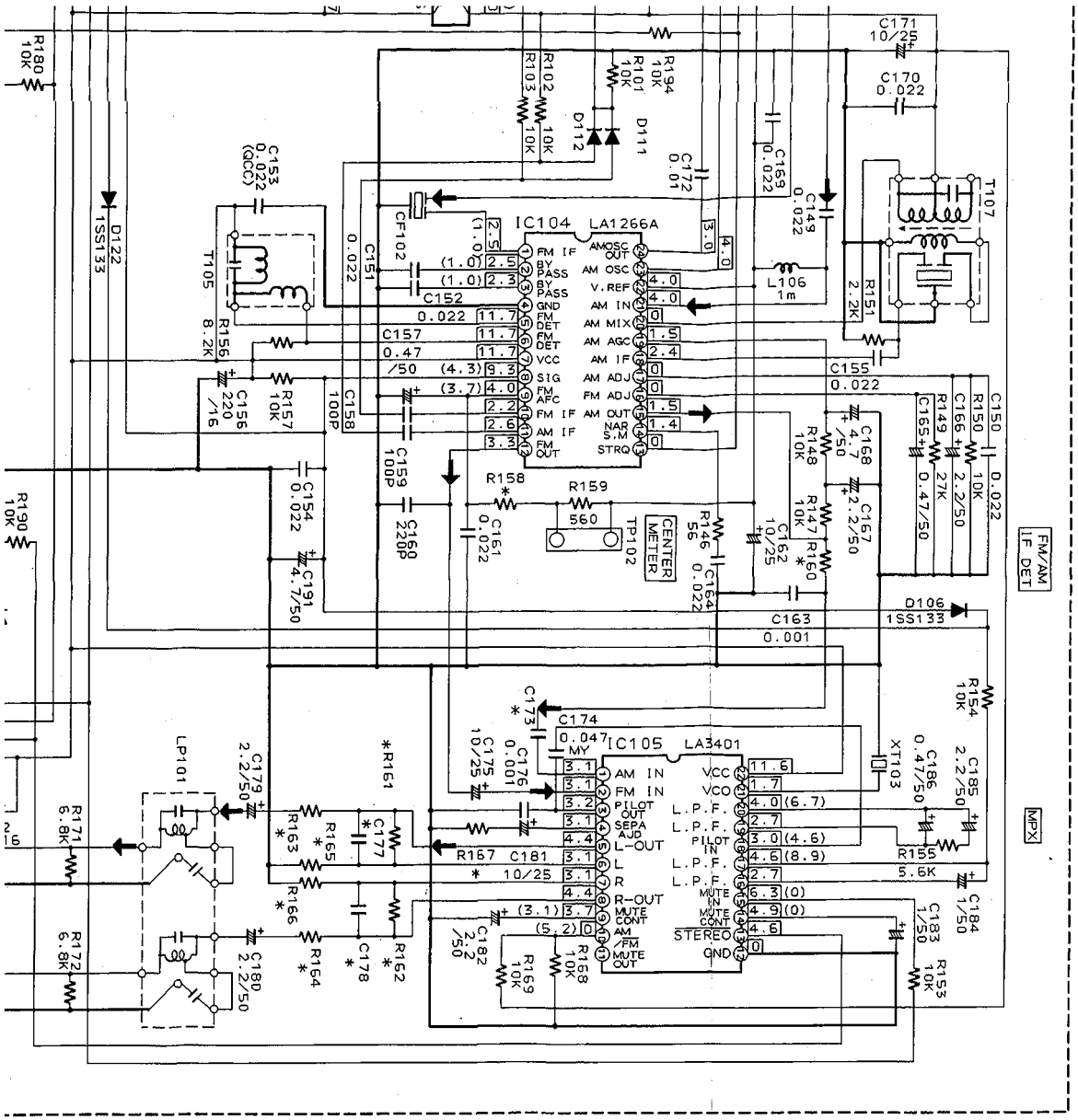


■ Tuner Section



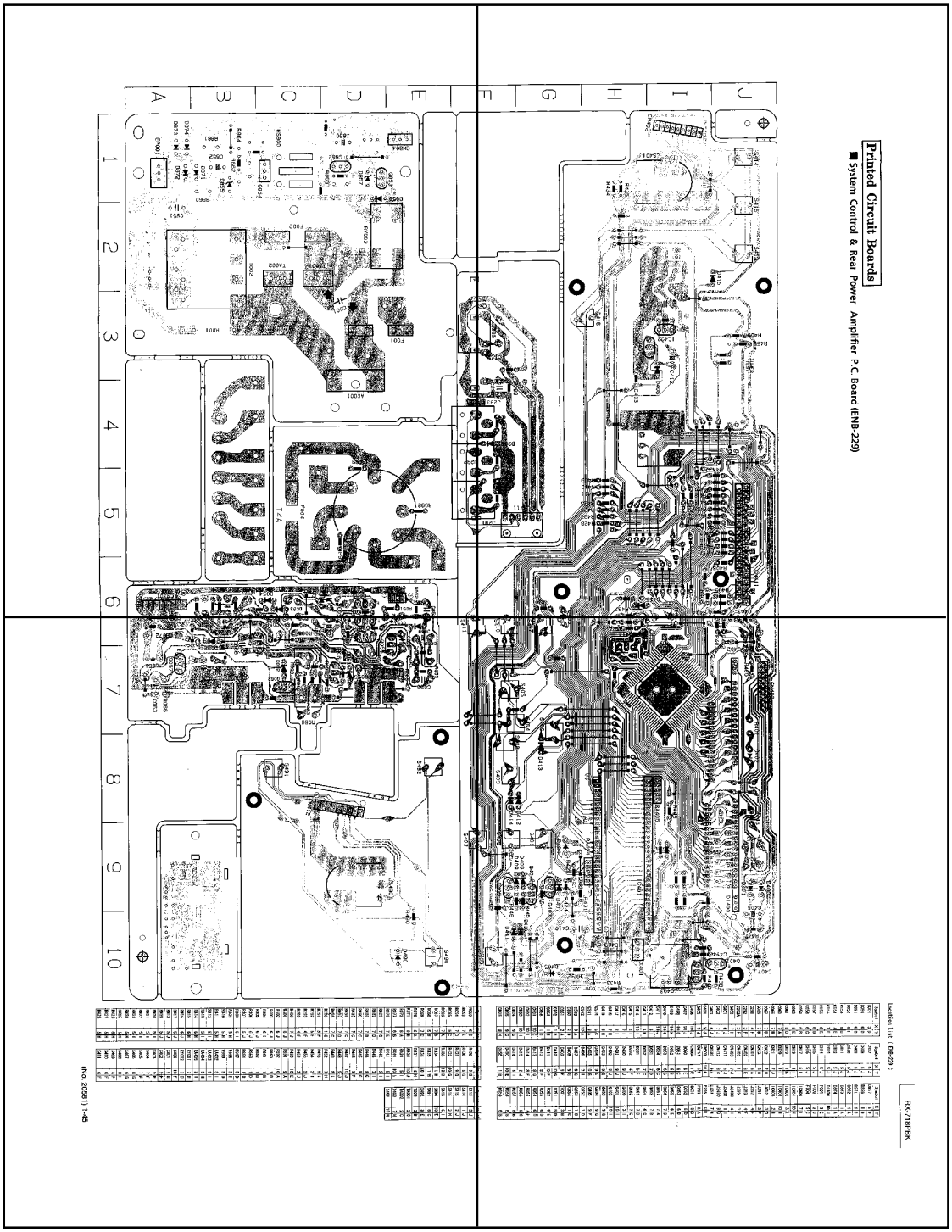


FROM CN001
OF ENH-283-1



	U, US, UB, UT	A	J, C
R109	68 UNF (1/4W)	68 UNF (1/4W)	68 UNF (1/4W)
R167	39K	47K	39K
R160	5.6K	10K	5.6K
R161, 162	82K	100K	82K
R163, 164	4.7K	3.3K	4.7K
R165, 166	180K	270K	180K
C177, 178	820P	560P	820P
R158	27K	27K	18K
C173	0.039	0.022	0.039

P1-45-a P1-45-b

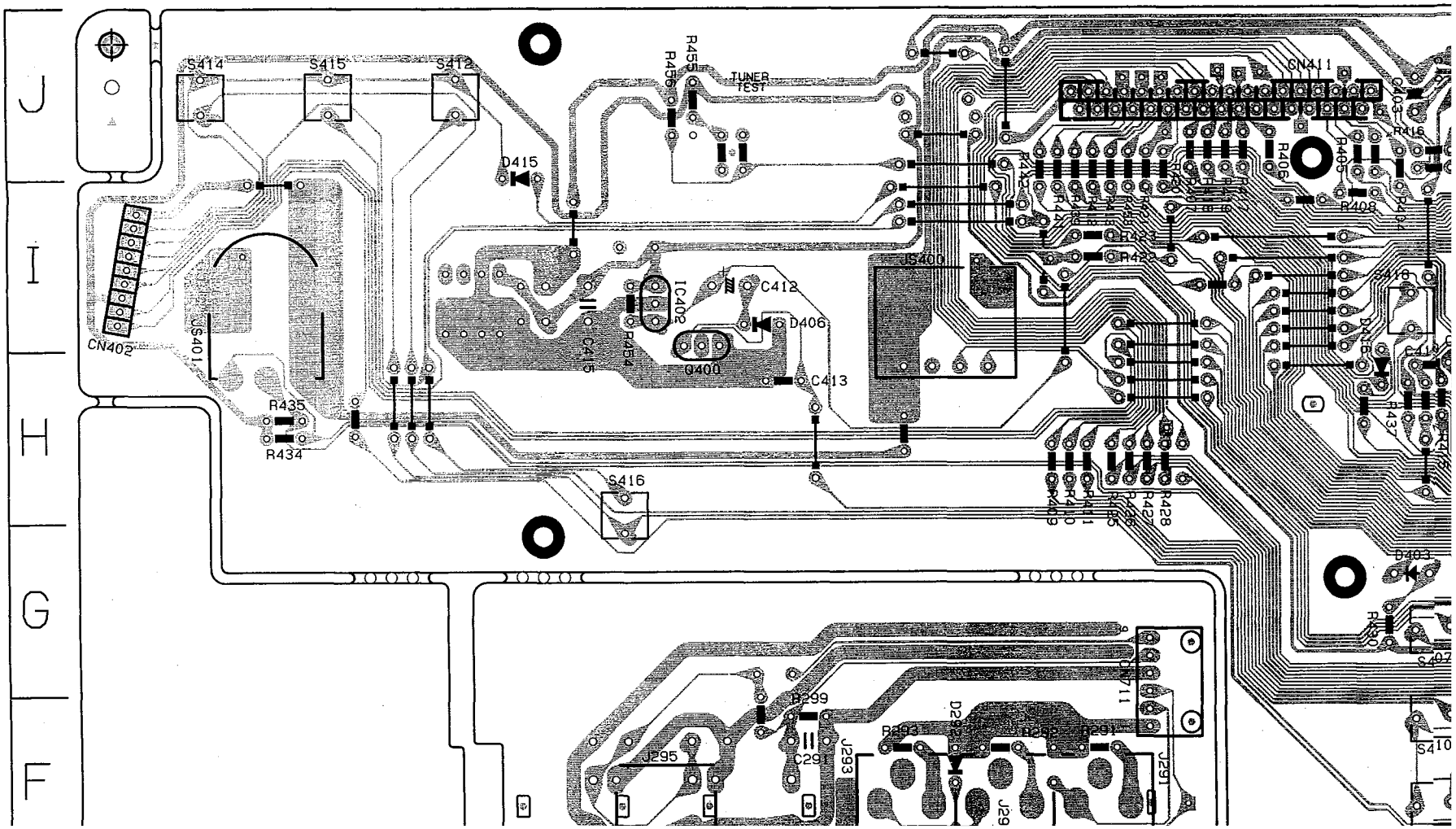


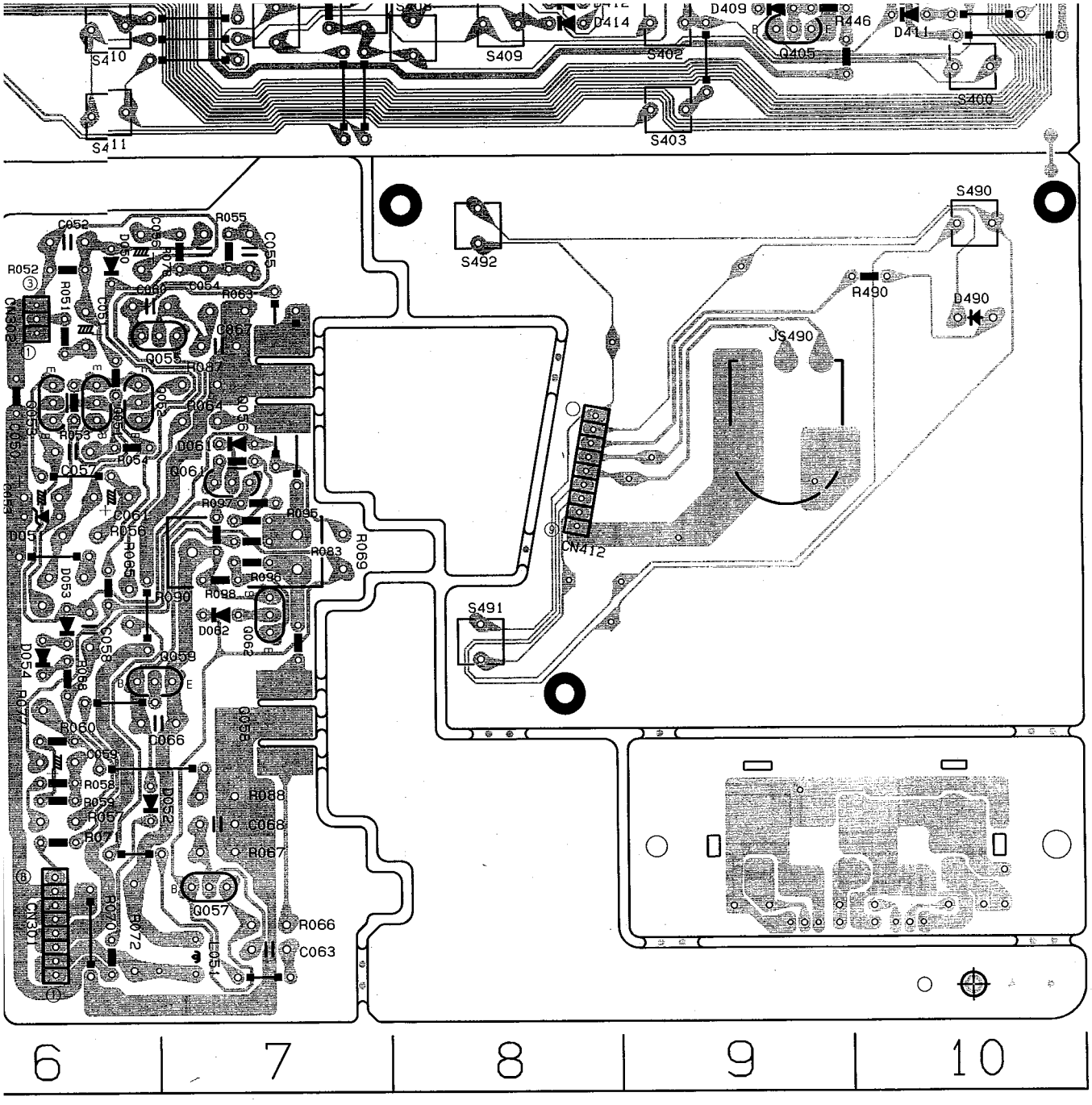
P1-45-c P1-45-d

A
B
C
D
E
F
1
2
3
4
5
6
EP001
D873
D874
R861
R864
HS800
C850
CN804
D852
D872
D871
C852
R862
D855
Q854
R863
D857
Q853
R860
D858
C851
F002
RY002
T002
TA002
TA001
C001
R001
F001
AC001
R999
J292
F004
T4A
R998
R997
CN302
R052
R051
C052
C057
D053
D054
R077
CN301
R070

Printed Circuit Boards

■ System Control & Rear Power Amplifier P.C. Board (ENB-229)





CH04	9	G
CH05	9	G
CH06	8	H

D416	6	I
D490	10	E
D855	1	B

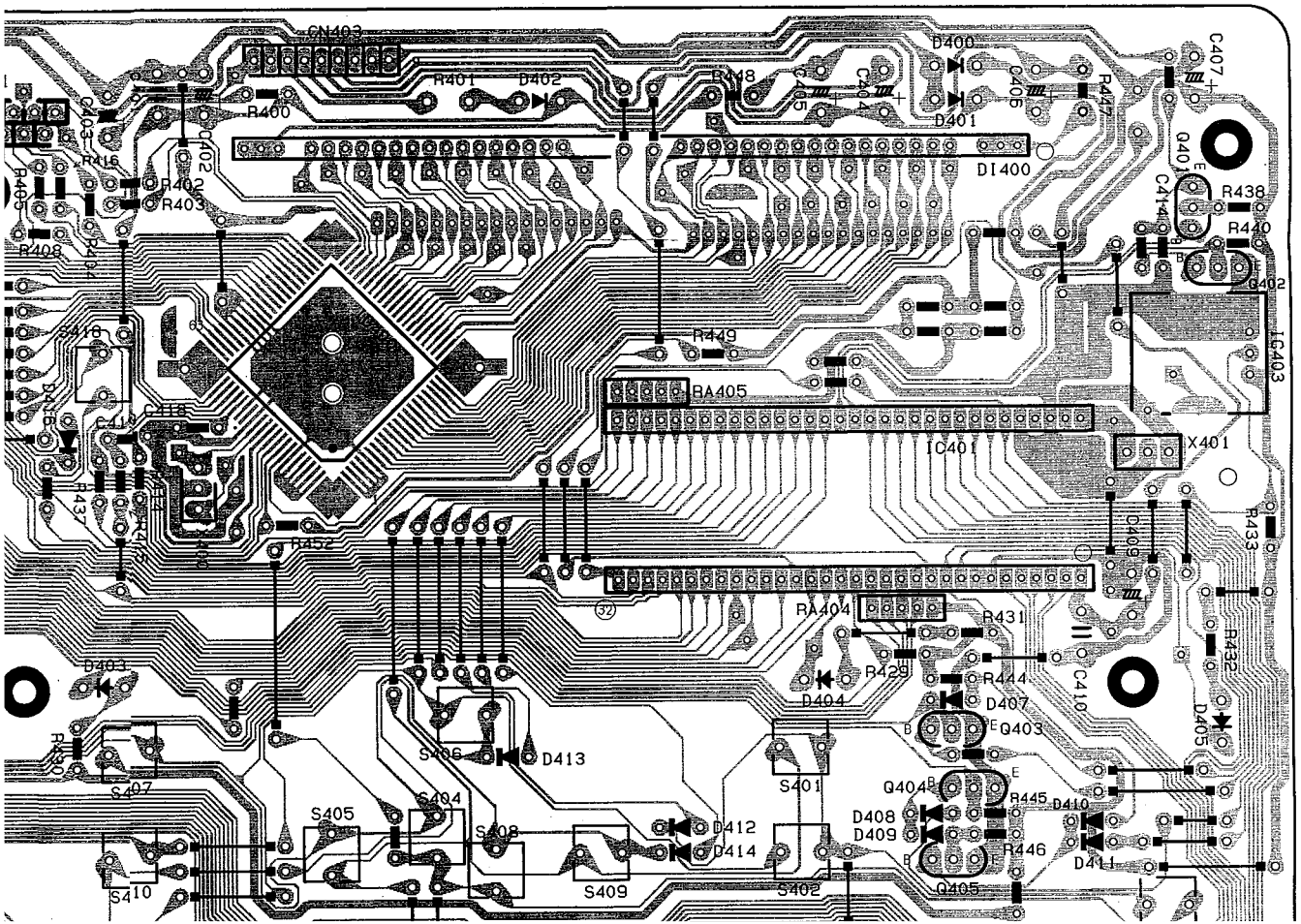
R057	6	B
R058	6	B
R059	6	B

Symbol	X	Y
R060	6	B
R063	7	E
R064	7	D
R065	6	C
R066	7	A
R067	7	B
R068	6	B
R069	7	C
R070	6	A
R071	6	B
R072	6	A
R077	6	B
R078	7	E
R083	7	C
R087	7	D
R088	7	B
R090	7	C
R095	7	C
R096	7	C
R097	7	D
R098	7	C
R206	1	C
R291	5	F
R292	5	F
R293	4	F
R299	4	F
R400	7	J
R401	8	J
R402	6	J
R403	6	J
R404	6	I
R405	6	J
R406	6	J
R407	5	J
R408	6	I
R409	5	H
R410	5	H
R411	5	H
R412	5	I
R413	5	I
R414	6	H
R415	6	H
R416	6	J
R417	5	J
R418	5	J
R419	5	J
R420	5	I
R421	5	I
R422	5	I
R423	5	I
R424	5	H
R425	5	H
R426	5	H
R427	5	H
R428	5	H

Symbol	X	Y
R429	9	G
R430	6	G
R431	9	G
R432	10	G
R433	10	H
R434	1	H
R435	1	H
R436	10	I
R437	6	H
R438	10	J
R439	5	I
R440	10	I
R441	5	I
R442	5	I
R443	3	I
R444	9	G
R445	9	G
R446	9	F
R447	10	J
R448	9	J
R449	8	I
R452	7	H
R453	5	I
R454	3	I
R455	3	J
R456	3	J
R490	10	E
R591	9	A
R592	10	A
R860	1	B
R861	1	B
R862	1	B
R863	1	D
R864	1	B
R997	5	D
R998	5	E
R999	5	D
RA402	8	I
RA403	8	I
RA404	9	H
RA405	8	I
RY001	2	E
RY002	2	D
S400	10	F
S401	9	G
S402	9	F
S403	9	F
S404	7	F
S405	7	F
S406	8	G
S407	6	G
S408	8	F
S409	8	F
S410	6	F
S411	6	F

Symbol	X	Y
S412	2	J
S414	1	J
S415	2	J
S416	3	H
S418	6	I
S490	10	E
S491	8	C
S492	8	E
T002	2	B
TA001	2	C
TA002	2	C
X400	7	H
X401	10	H

RX-718PBK



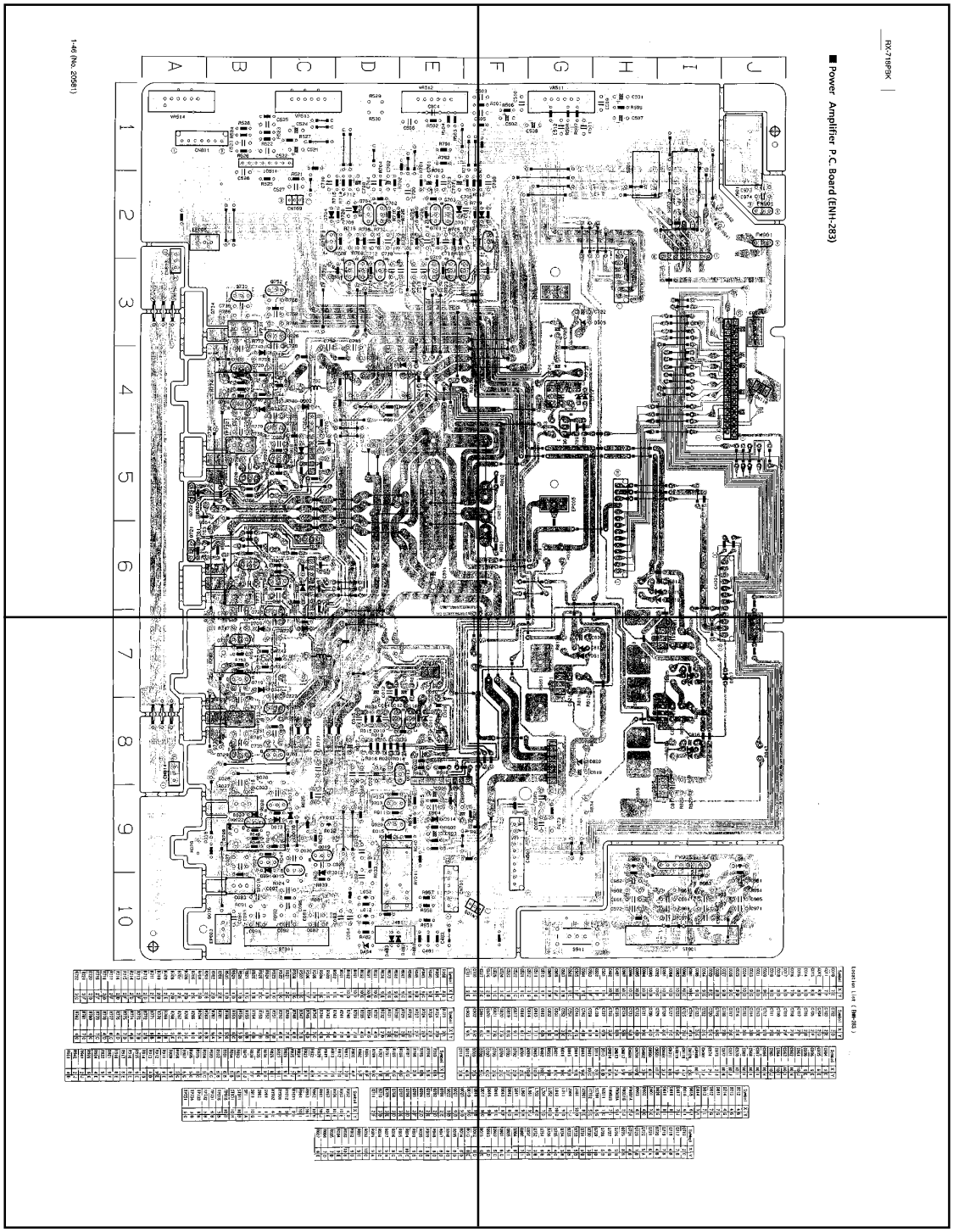
Location List (ENB-229)

Symbol	X	Y
C001	3	D
C050	6	D
C051	6	D
C052	6	E
C053	6	D
C054	7	E
C055	7	E
C056	6	E
C057	6	D
C058	6	G
C059	6	B
C060	6	E
C061	6	D
C063	7	A
C066	7	B
C067	7	D
C068	7	B
C291	4	F
C292	3	F
C292A	3	F
C400	7	H
C401	6	J
C402	7	J
C403	6	J
C404	9	J
C405	9	J
C406	10	J
C407	10	J
C408	10	G
C409	10	H
C410	10	G
C411	10	J
C412	3	I
C413	3	H
C414	10	I
C415	3	I
C416	2	I
C417	2	I
C418	7	H
C419	6	H
C514	6	C
C591	9	A
C592	10	A
C593	9	A
C850	1	D
C851	2	A
C852	1	B
C854	1	B
C858	1	D
CH01	10	G
CH02	10	I
CH03	10	H
CH04	9	G
CH05	9	G
CH06	8	H

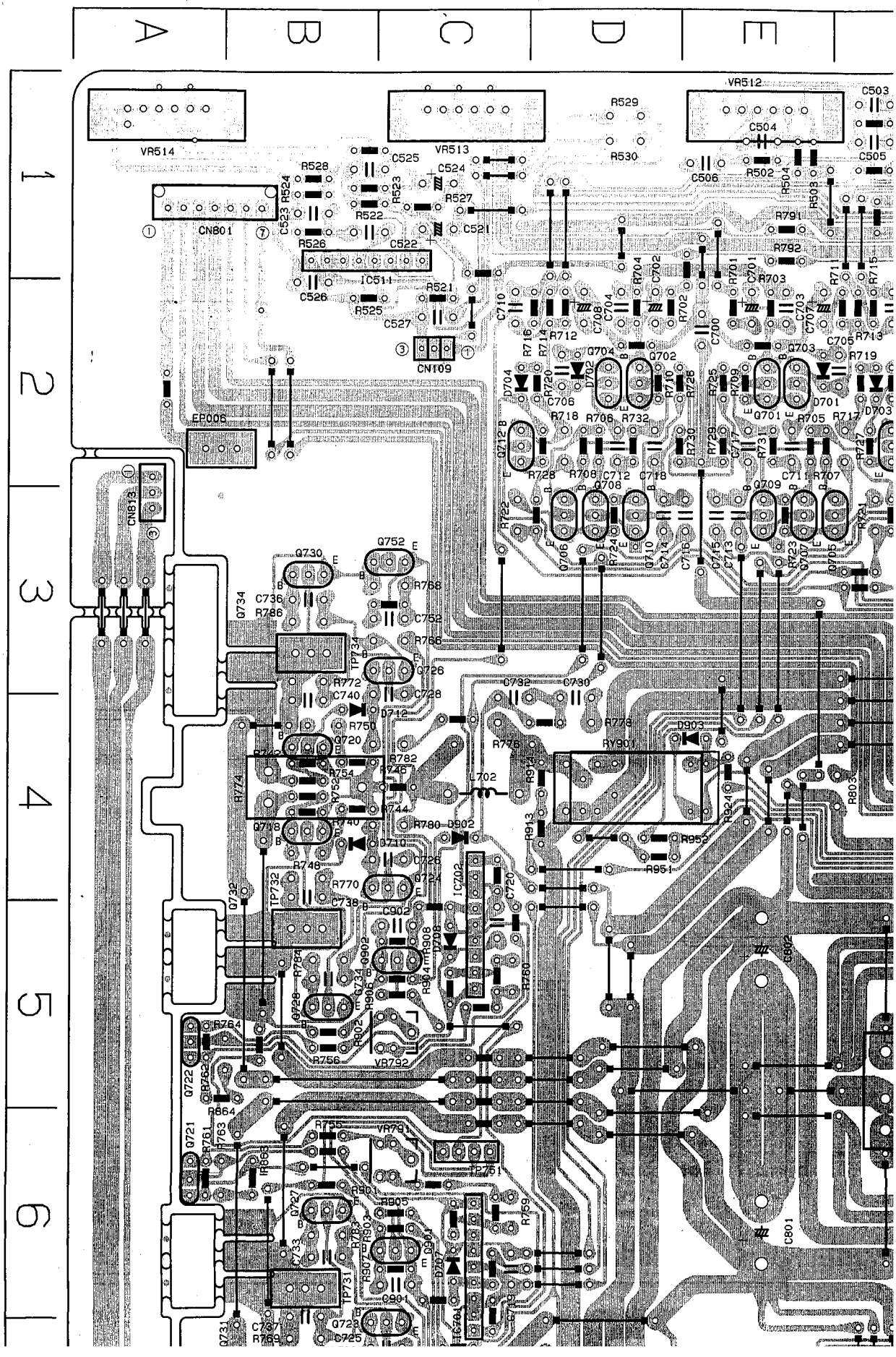
Symbol	X	Y
CH07	6	J
CH08	6	J
CH09	6	J
CH10	6	J
CH11	5	J
CH12	5	J
CH13	5	J
CH14	5	J
CH15	5	J
CH16	5	J
CH17	5	I
CH18	4	I
CH19	5	H
CH20	1	I
CH21	7	J
CH22	7	H
CH23	6	H
CN301	6	A
CN302	6	E
CN402	1	I
CN403	7	J
CN411	5	J
CN412	8	C
CN502	9	A
CN503	10	A
CN711	5	F
CN804	1	E
D050	6	E
D051	6	C
D052	6	B
D053	6	C
D054	6	C
D061	7	D
D062	7	C
D291	5	F
D292	4	F
D400	9	J
D401	9	J
D402	8	J
D403	6	G
D404	9	G
D405	10	G
D406	3	I
D407	9	G
D408	9	G
D409	9	F
D410	10	G
D411	10	F
D412	8	F
D413	8	G
D414	8	F
D415	2	J
D416	6	I
D490	10	E
D855	1	B

Symbol	X	Y
D857	1	D
D858	1	D
D871	1	B
D872	1	A
D873	1	A
D874	1	A
D1400	10	J
F001	3	E
F002	2	D
F004	5	C
IC400	7	I
IC401	10	H
IC402	3	I
IC403	10	I
IC404	2	I
J002	3	D
J291	5	F
J292	4	F
J293	4	F
J295	3	F
JS400	4	I
JS401	1	I
JS490	9	D
L051	7	A
P206	1	D
P207	2	A
Q051	6	D
Q052	6	D
Q053	6	D
Q055	6	E
Q056	7	D
Q057	7	A
Q058	7	B
Q059	6	C
Q061	7	D
Q062	7	C
Q400	3	I
Q401	10	I
Q402	10	I
Q403	9	G
Q404	9	G
Q405	9	F
Q852	1	D
Q853	1	D
Q854	1	C
R001	3	B
R051	6	D
R052	6	E
R053	6	D
R054	6	D
R055	7	E
R056	6	C
R057	6	B
R058	6	B
R059	6	B

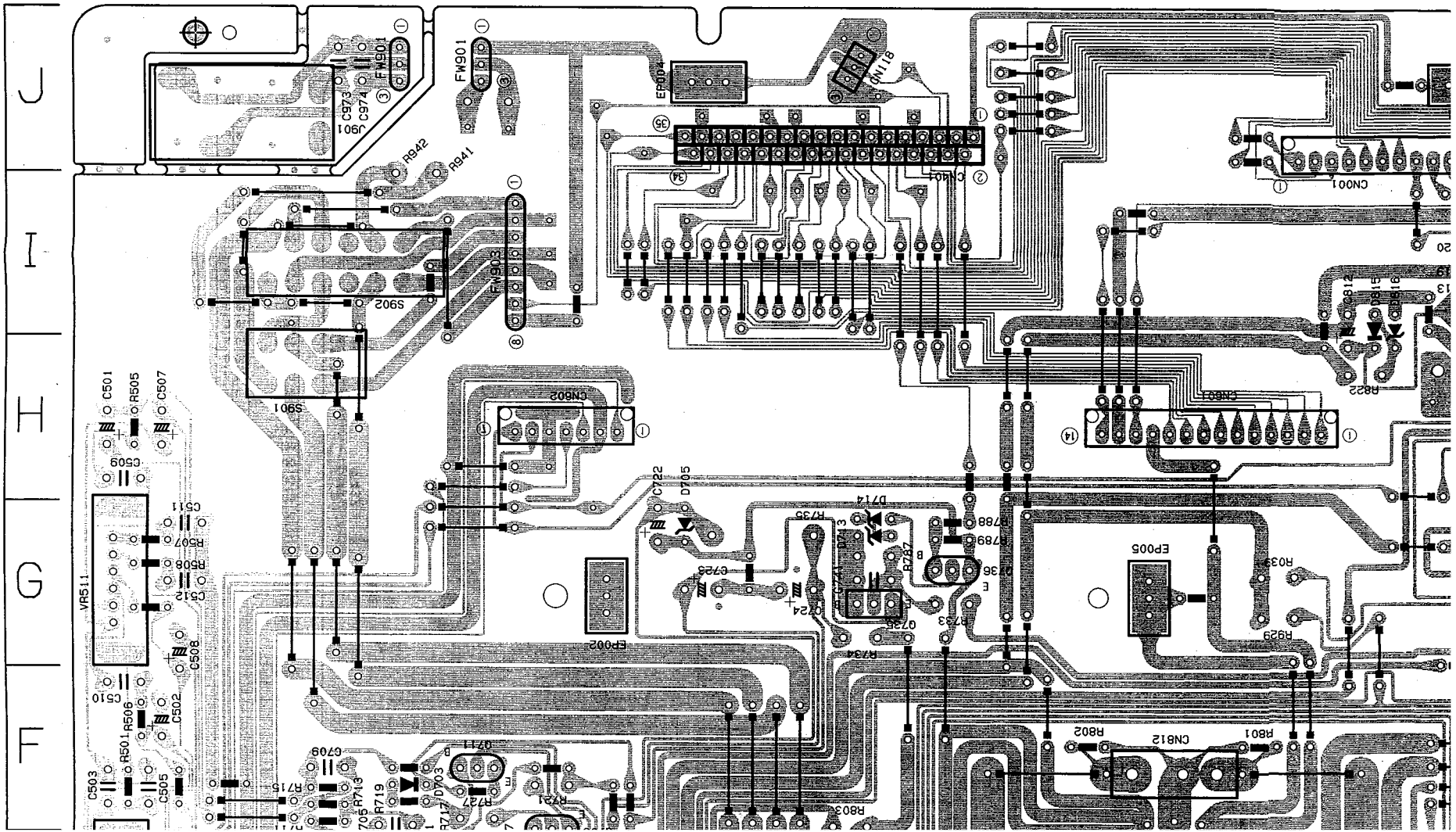
P1-46-a P1-46-b

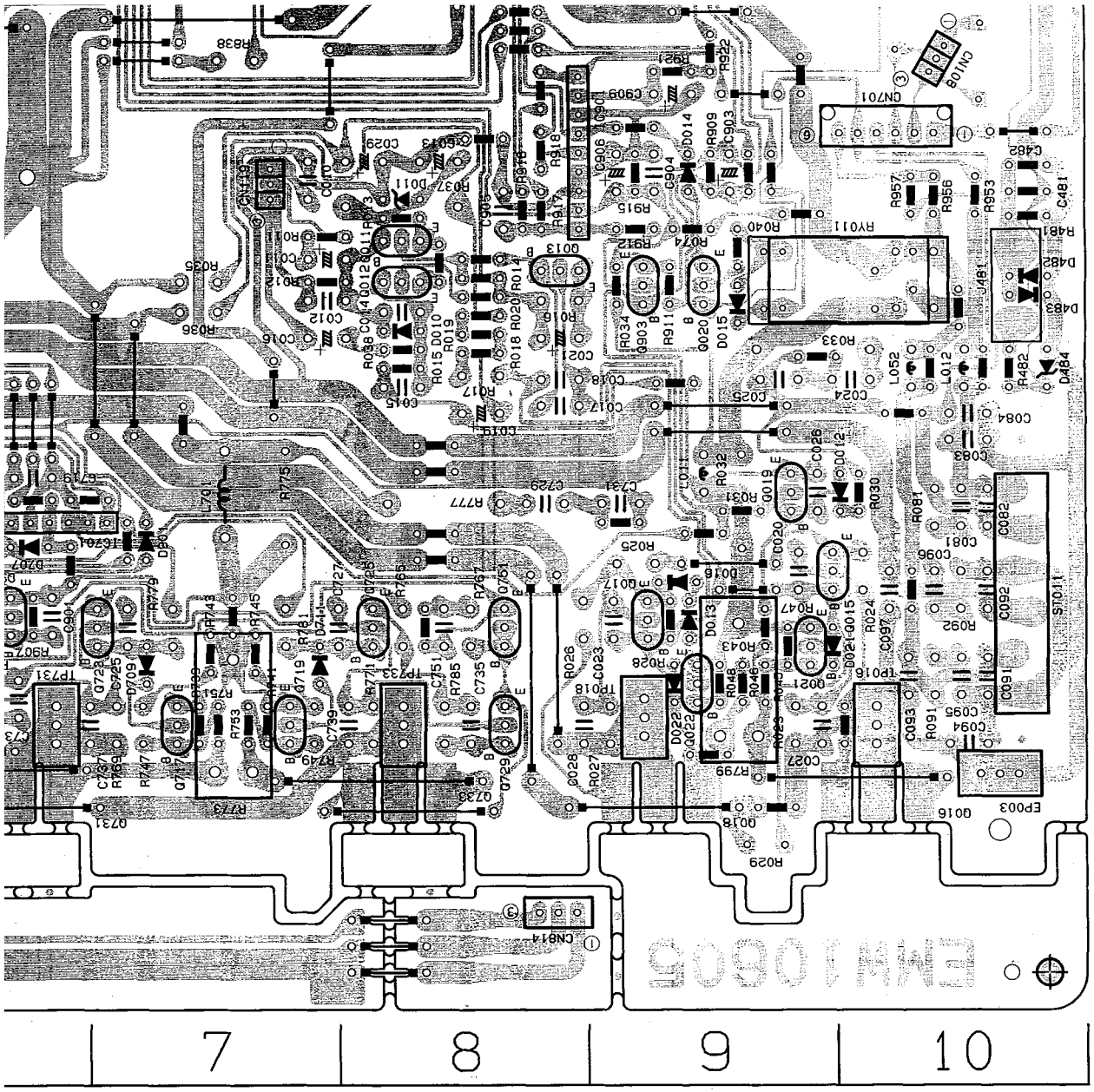


P1-46-c P1-46-d


A
B
C
D
E
1
2
3
4
5
6
VR514
VR513
VR512
CN801
CN109
CN813
EP006
IC511
IC702
RY901
VR792
VR791
TP734
TP732
TP731
TP761
C801
C902
C901
D902
D903
L702

■ Power Amplifier P.C. Board (ENH-283)





C526	2	B
C527	2	C
C700	2	E
C701	2	E

C870	8	I
C901	6	C
C902	5	C
C903	9	E

D707	6	C
D708	5	C
D709	7	B
D710	4	B
D711	7	B

Q016	9	B
Q017	9	C
Q018	9	B
Q019	9	C
Q020	9	D
Q021	9	B
Q022	9	B
Q701	2	E
Q702	2	D
Q703	2	E
Q704	2	D
Q705	3	F
Q706	3	D
Q707	3	E
Q708	3	D
Q709	3	E
Q710	3	D
Q711	2	F

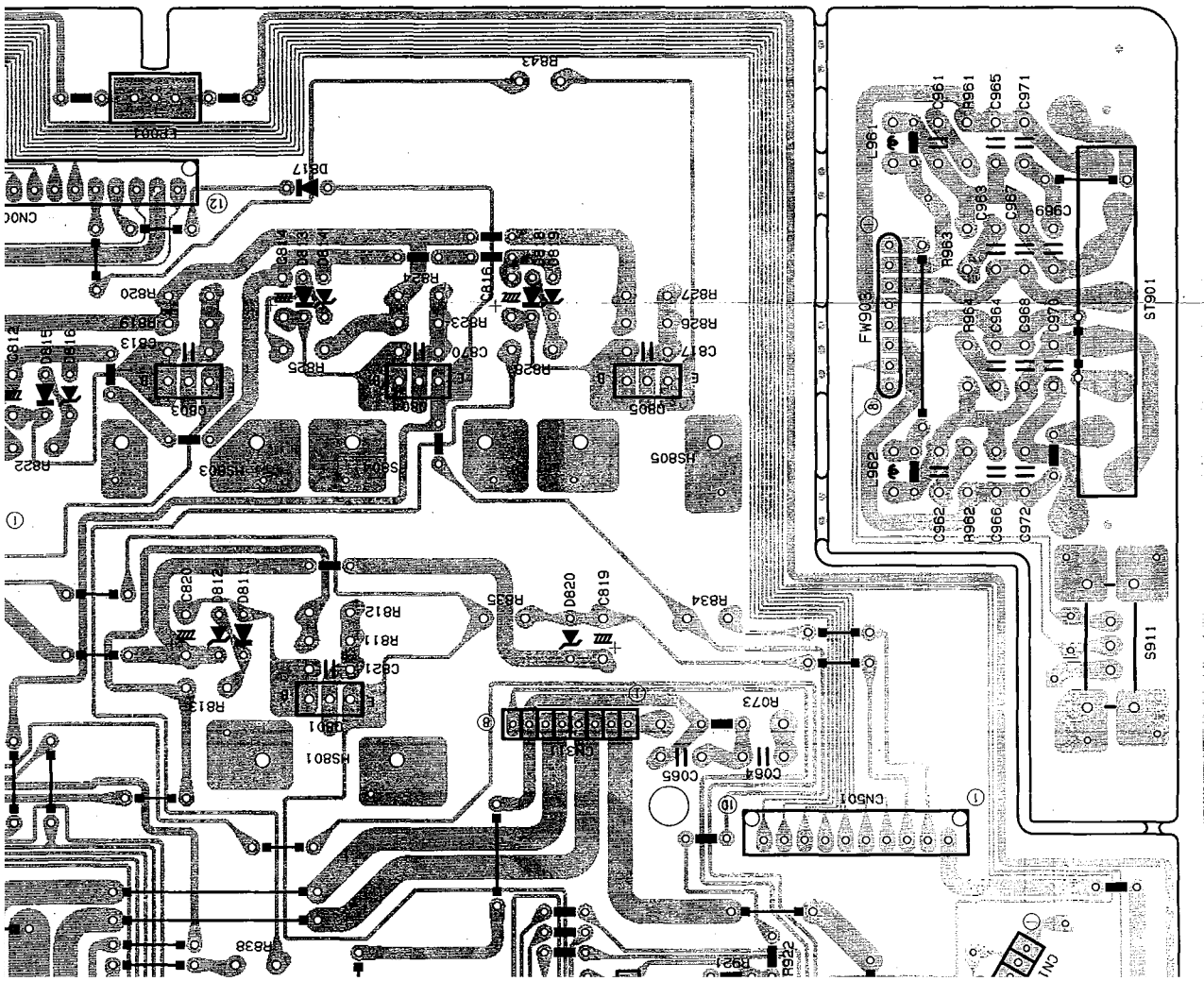
Q903	9	D
R011	8	E
R012	8	D
R013	8	E
R014	8	D
R015	8	D
R016	8	D
R017	8	D
R018	8	D
R019	8	D
R020	8	D
R023	9	B
R024	10	C
R025	9	C
R026	8	C
R027	9	B
R028	9	C
R029	9	A
R030	10	C
R031	9	C
R032	9	D
R033	10	D
R034	9	E
R035	7	D
R036	7	D
R037	8	E

Symbol	X	Y
R038	8	D
R039	6	G
R040	9	E
R043	9	C
R045	9	B
R046	9	B
R047	9	C
R048	9	B
R073	9	G
R074	9	E
R081	10	C
R091	10	B
R092	10	C
R481	10	E
R482	10	D
R501	1	F
R502	1	E
R503	1	E
R504	1	E
R505	1	H
R506	1	F
R507	1	G
R508	1	G
R521	2	C
R522	1	C
R523	1	C
R524	1	B
R525	2	C
R526	1	B
R527	1	C
R528	1	B
R529	1	D
R530	1	D
R701	2	E
R702	2	D
R703	2	E
R704	2	D
R705	2	E
R706	2	D
R707	2	E
R708	2	D
R709	2	E
R710	2	D
R711	2	F
R712	2	D
R713	2	F
R714	2	D
R715	2	F
R716	2	D
R717	2	F
R718	2	D
R719	2	F
R720	2	D
R721	3	F
R722	3	C

Symbol	X	Y
R723	3	E
R724	3	D
R725	2	E
R726	2	D
R727	2	F
R728	2	D
R729	2	E
R730	2	D
R731	2	E
R732	2	D
R733	4	G
R734	4	G
R735	4	G
R739	7	B
R740	4	B
R741	7	B
R742	4	B
R743	7	C
R744	4	B
R745	7	C
R746	4	B
R747	7	B
R748	4	B
R749	7	B
R750	4	B
R751	7	B
R752	4	B
R753	7	B
R754	4	B
R755	6	B
R756	5	B
R759	6	C
R760	5	C
R761	6	A
R762	5	A
R763	6	B
R764	5	B
R765	8	C
R766	3	C
R767	8	C
R768	3	C
R769	7	B
R770	4	B
R771	8	B
R772	3	B
R773	7	B
R774	4	B
R775	7	D
R776	4	D
R777	8	C
R778	4	D
R779	7	C
R780	4	C
R781	7	C
R782	4	C

Symbol	X	Y
R783	6	B
R784	5	B
R785	8	B
R786	3	B
R787	4	G
R788	4	G
R789	4	G
R791	1	E
R792	1	E
R799	9	C
R801	6	F
R802	5	F
R803	4	F
R811	7	G
R812	7	G
R813	7	G
R819	7	I
R820	7	I
R822	6	H
R823	8	I
R824	8	I
R825	7	I
R826	9	I
R827	9	I
R828	8	I
R834	9	G
R835	8	G
R838	7	F
R843	8	J
R863	6	B
R864	5	B
R901	6	B
R902	5	B
R903	6	C
R904	5	C
R905	6	C
R906	5	C
R907	6	C
R908	5	G
R909	9	E
R911	9	E
R912	9	E
R913	4	D
R914	4	D
R915	9	E
R916	8	E
R917	8	E
R918	8	E
R921	9	F
R922	9	F
R924	4	E
R929	6	G
R941	2	J
R942	2	J
R951	4	D

Symbol	X	Y
R952	4	D
R953	10	E
R956	10	E
R957	10	E
R961	10	J
R962	10	H
R963	10	I
R964	10	I
RY011	9	E
RY012	9	E
RY901	4	E
RY902	4	E
S901	1	H
S902	1	I
S911	10	G
SP1	1	A
ST011	10	B
ST901	10	H
TP016	10	B
TP018	9	B
TP731	6	B
TP732	5	B
TP733	8	B
TP734	3	B
TP751	6	C



Location List (ENH-283)

Symbol	X	Y
C010	7	E
C011	7	E
C012	8	D
C013	8	E
C014	8	D
C015	8	D
C016	7	D
C017	8	D
C018	8	D
C019	8	D
C020	9	C
C021	8	D
C023	9	C
C024	10	D
C025	9	D
C026	9	C
C027	9	B
C028	8	B
C029	8	E
C064	9	G
C065	9	G
C081	10	C
C082	10	C
C083	10	D
C084	10	D
C091	10	B
C092	10	C
C093	10	B
C094	10	B
C095	10	B
C096	10	C
C097	10	C
C481	10	E
C482	10	E
C501	1	H
C502	1	F
C503	1	F
C504	1	E
C505	1	F
C506	1	E
C507	1	H
C508	1	F
C509	1	H
C510	1	F
C511	1	G
C512	1	G
C521	1	C
C522	1	C
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C527	2	C
C700	2	E

Symbol	X	Y
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C703	2	E
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C707	2	E
C708	2	D
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C711	2	E
C712	2	D
C713	3	E
C714	3	D
C715	3	E
C716	3	E
C717	2	E
C718	2	D
C719	6	C
C720	5	C
C722	3	G
C723	3	G
C724	4	G
C725	7	C
C726	4	C
C727	7	C
C728	3	C
C729	8	C
C730	4	D
C731	9	C
C732	4	D
C733	6	B
C734	5	B
C735	8	B
C736	3	B
C737	6	B
C738	4	B
C739	8	B
C740	4	B
C741	4	G
C751	8	C
C752	3	C
C801	6	E
C802	5	E
C812	6	H
C813	7	I
C814	7	I
C816	8	I
C817	9	I
C819	8	G
C820	7	G
C821	7	G
C870	8	I
C901	6	C
C902	5	C

Symbol	X	Y
C904	9	E
C905	8	E
C906	9	E
C909	9	E
C961	10	J
C962	10	H
C963	10	I
C964	10	I
C965	10	J
C966	10	H
C967	10	I
C968	10	I
C969	10	J
C970	10	I
C971	10	J
C972	10	H
C973	2	J
C974	2	J
CN001	7	J
CN108	10	F
CN109	2	C
CN118	4	J
CN119	7	E
CN311	8	G
CN401	3	J
CN501	10	F
CN601	6	H
CN602	3	H
CN701	10	E
CN801	1	B
CN812	5	F
CN813	2	A
CN814	8	A
D010	8	D
D011	8	E
D012	10	C
D013	9	C
D014	9	E
D015	9	D
D016	9	C
D021	9	C
D022	9	B
D482	10	E
D483	10	D
D484	10	D
D701	2	E
D702	2	D
D703	2	F
D704	2	C
D705	3	G
D707	6	C
D708	5	C
D709	7	B

Symbol	X	Y
D712	4	B
D713	4	G
D714	4	G
D811	7	G
D812	7	G
D813	7	I
D814	7	I
D815	6	I
D816	6	I
D817	7	J
D818	8	I
D819	8	I
D820	8	G
D901	7	C
D902	4	C
D903	4	E
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FW901B	2	J
FW903A	9	I
FW903B	2	I
IC511	1	C
IC701	6	C
IC702	5	C
IC901	8	E
J481	10	D
J901	1	J
L011	9	D
L012	10	D
L052	10	D
L701	7	D
L702	4	C
L961	9	J
L962	9	H
Q011	8	E
Q012	8	D
Q013	8	E
Q015	9	C
Q016	9	B
Q017	9	C
Q018	9	B

Symbol	X	Y
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Q717	7	B
Q718	4	B
Q719	7	B
Q720	4	B
Q721	6	A
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Q735	4	G
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Q752	3	B
Q801	7	G
Q803	7	I
Q804	8	I
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Q903	9	D
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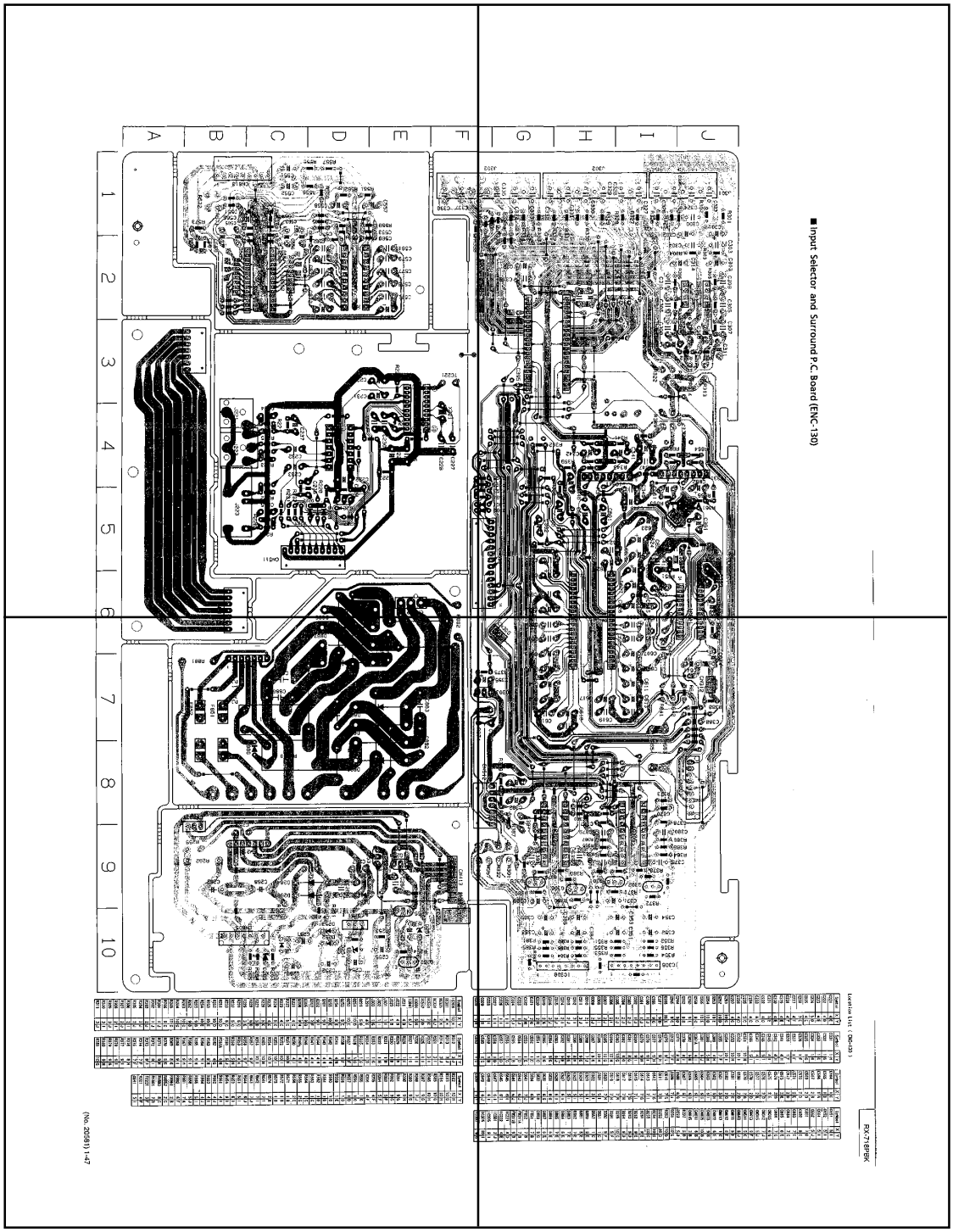
R012	8	D

P1-47-a P1-47-b



P1-47-c P1-47-d

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CN513
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X221
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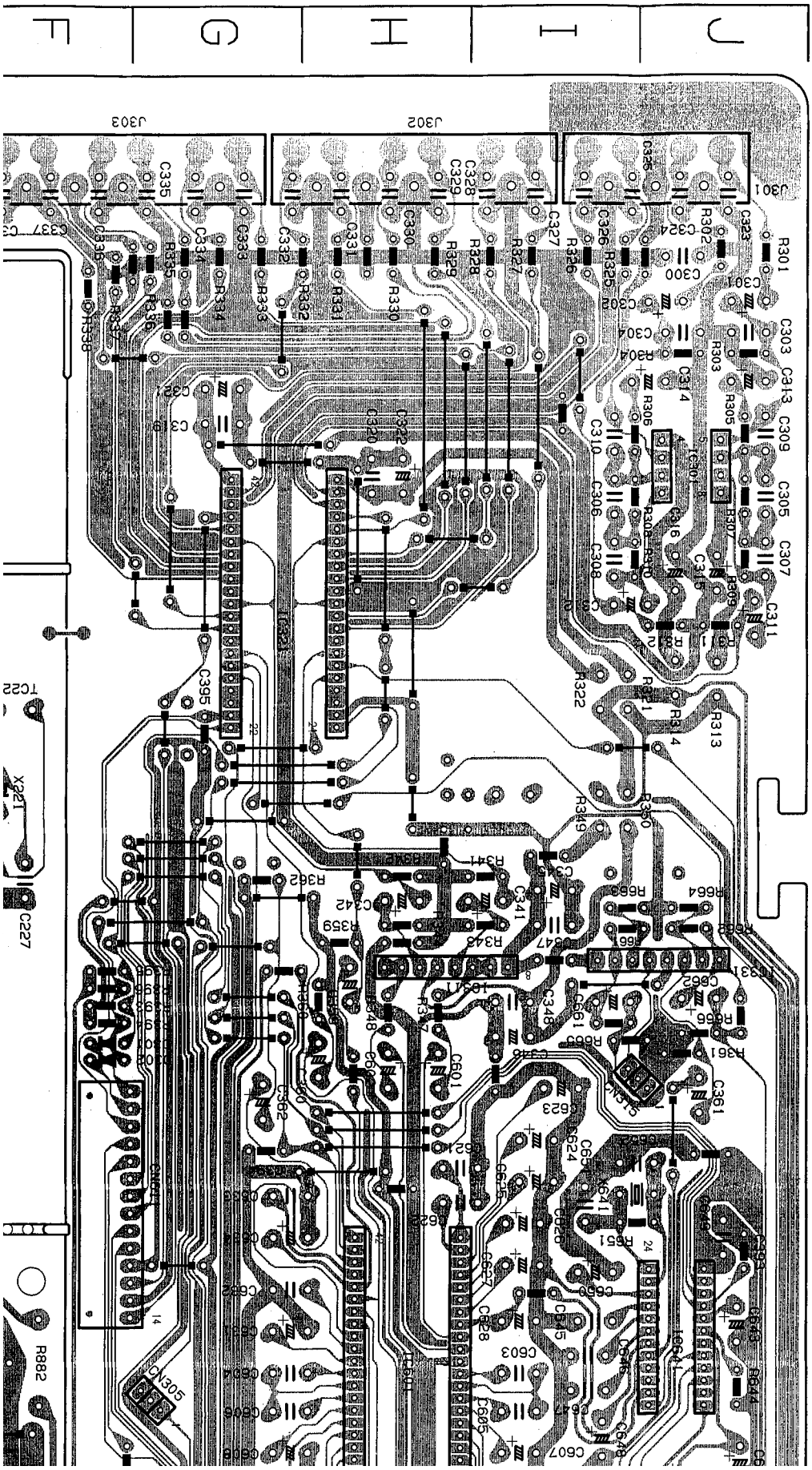
J222
J223
CN511

■ Input Selector and Surround P.C. Board (ENC-130)



Symbol	X	Y
IC308	10	H
IC311	4	H
IC321	2	H
IC331	4	J
IC551	2	C
IC552	2	D
IC601	6	H
IC641	6	J
J221	4	B
J222	4	B
J223	5	B
J301	1	I
J302	1	I
J303	1	G
L221	4	E
Q221	5	D
Q251	10	D
Q252	10	E
Q253	9	E
Q254	9	E
Q255	10	E
Q301	9	I
Q302	9	I
Q303	7	F
Q305	9	G
Q306	9	H
R221	4	C
R222	5	C
R223	4	C
R224	5	C
R225	4	C
R226	5	C
R227	5	D
R228	5	D
R229	3	E
R231	5	C
R232	5	C
R233	5	C
R251	10	D
R252	10	D
R253	10	E
R254	10	E
R255	9	B
R262	9	B
R263	10	C
R264	10	C
R265	10	C
R266	9	C
R301	1	J
R302	2	J
R303	2	J
R304	2	J
R305	2	J
R306	2	I
R307	2	J
R308	2	I
R309	3	J
R310	3	I
R311	3	J

Symbol	X	Y
R312	3	J
R313	3	J
R314	3	J
R321	3	I
R322	3	I
R325	1	I
R326	1	I
R327	1	I
R328	1	I
R329	1	H
R330	1	H
R331	1	H
R332	1	H
R333	1	G
R334	1	G
R335	1	G
R336	1	G
R337	1	F
R338	1	F
R341	4	H
R342	4	H
R343	4	H
R344	4	H
R347	4	H
R348	4	H
R349	4	I
R350	4	I
R351	10	H
R352	10	I
R353	10	I
R354	10	I
R355	10	H
R356	10	I
R357	9	F
R358	9	F
R359	4	H
R360	5	H
R361	5	J
R361A	4	H
R362	4	G
R363	9	H
R364	9	I
R365	9	H
R366	9	I
R367	9	H
R368	9	I
R369	8	G
R370	8	G
R371	9	H
R372	9	I
R373	8	I
R374	7	F
R375	7	F
R376	8	H
R377	9	I
R378	9	I
R379	9	G
R380	9	H
R381	10	G

Symbol	X	Y
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R383	10	G
R384	10	H
R385	10	G
R386	10	H
R387	9	G
R388	7	J
R389	9	G
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R391	9	G
R392	9	G
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R394	5	F
R395	4	F
R396	4	F
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R565	2	C
R566	2	C
R571	1	B
R572	1	B
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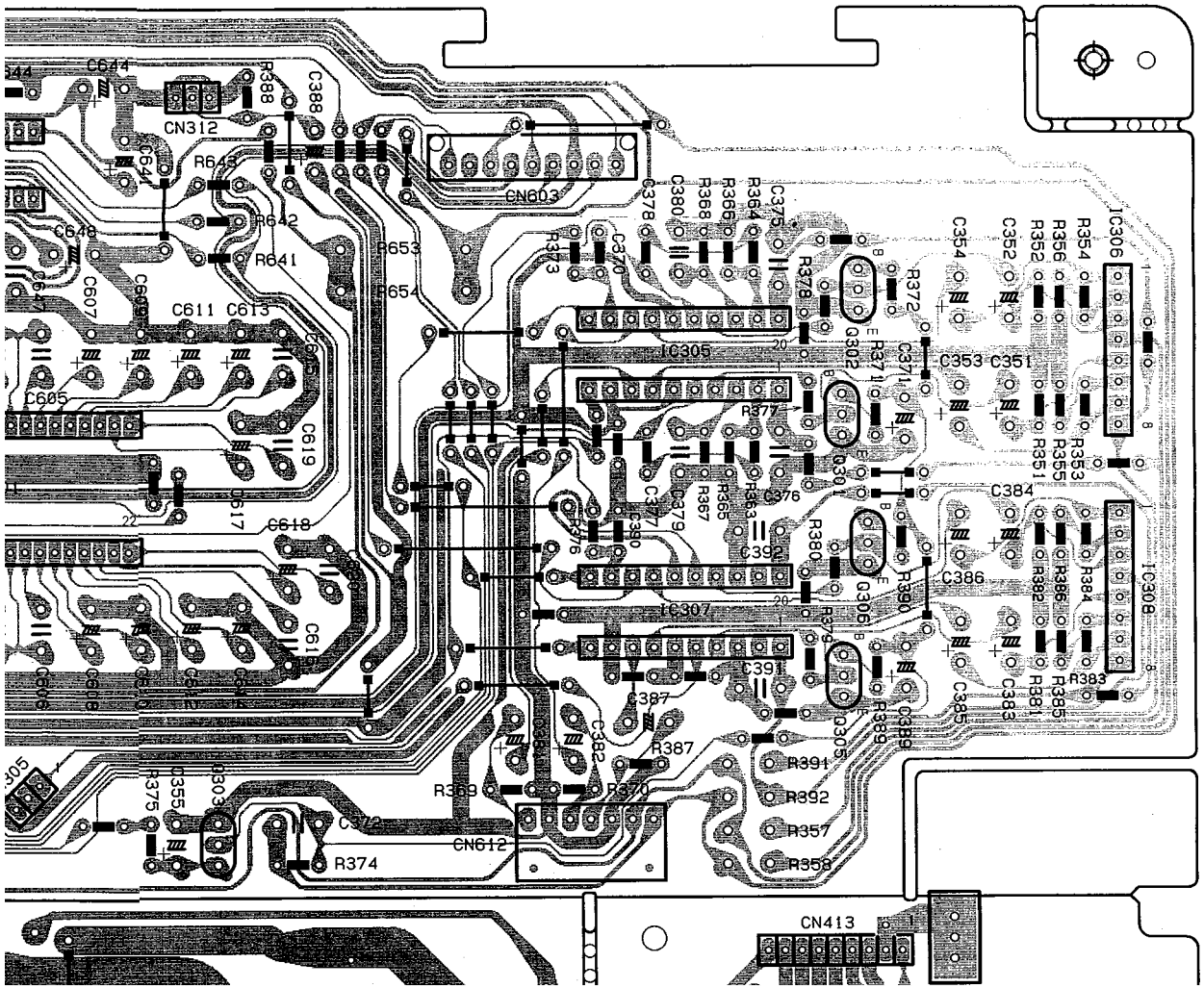
R574	2	B
R641	7	I
R642	7	I
R643	7	J
R644	6	J
R651	5	I
R653	8	I
R654	8	I
R661	4	I
R662	4	J
R663	4	I
R664	4	J
R665	5	I
R666	5	J
R881	7	A
R882	6	F
RA551	2	B
RA552	2	C
RY880	8	C
RY881	7	B
TC221	3	F
X221	4	F
X641	5	I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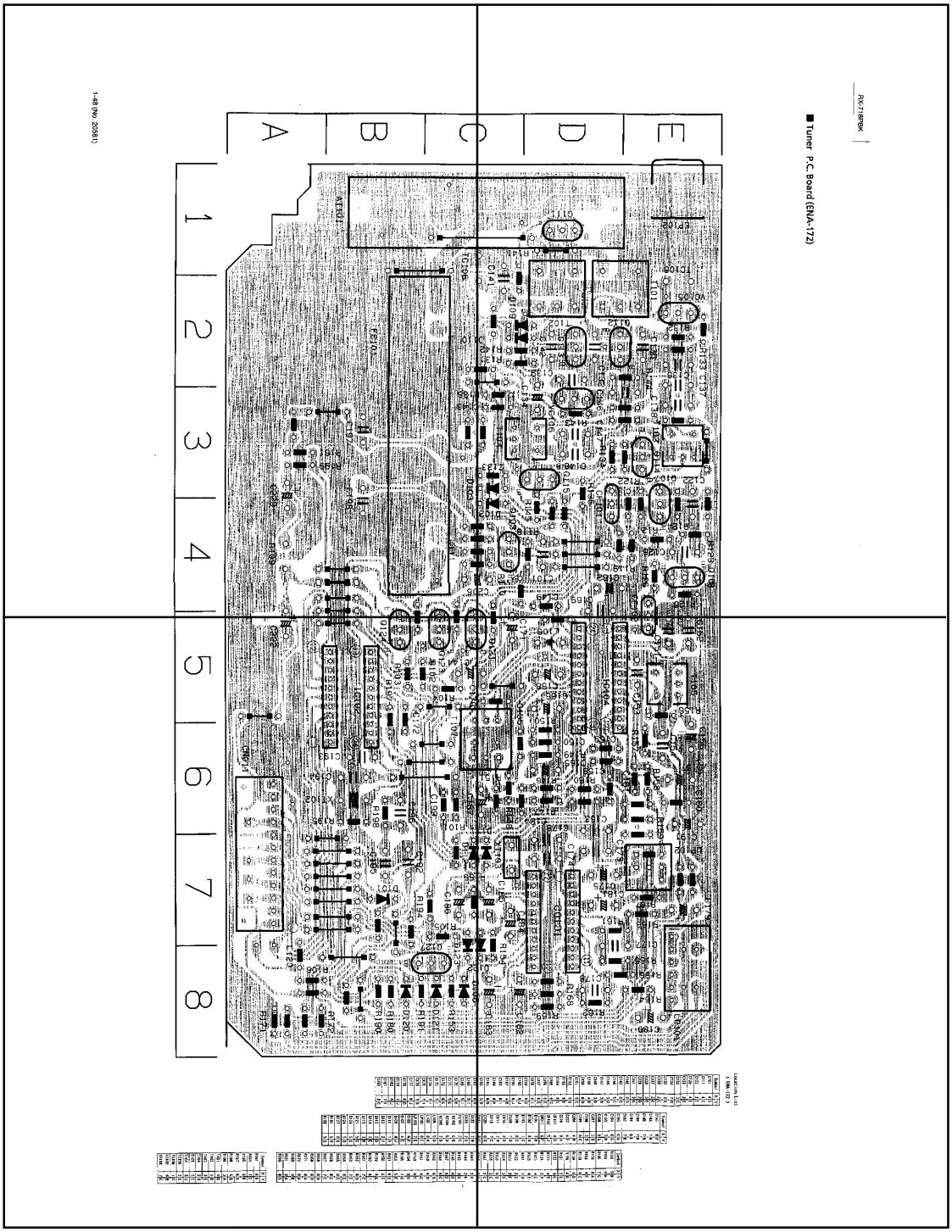
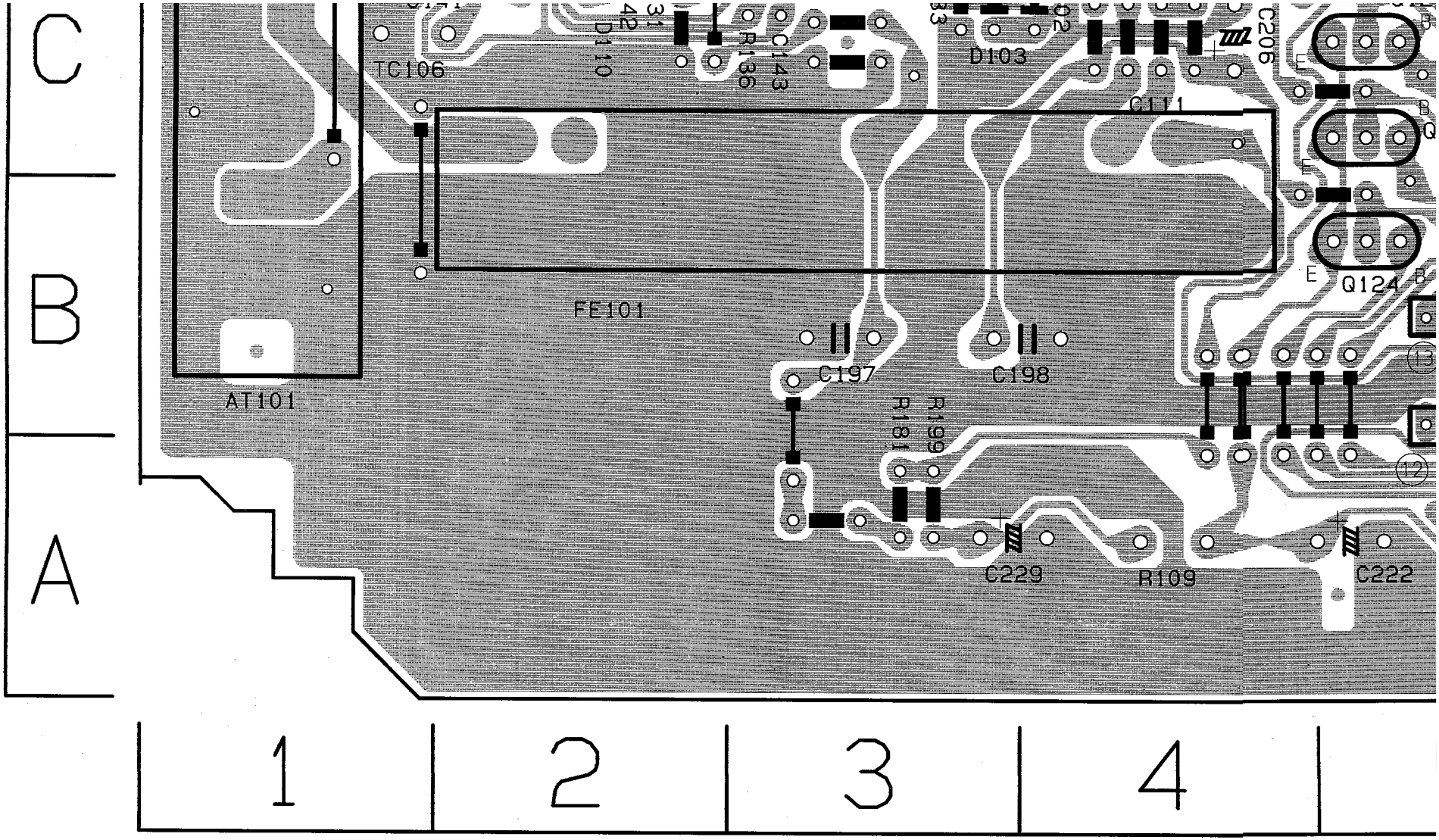
P1-48-a P1-48-b



P1-48-c P1-48-d


C
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TC106
D103
C111
C206
FE101
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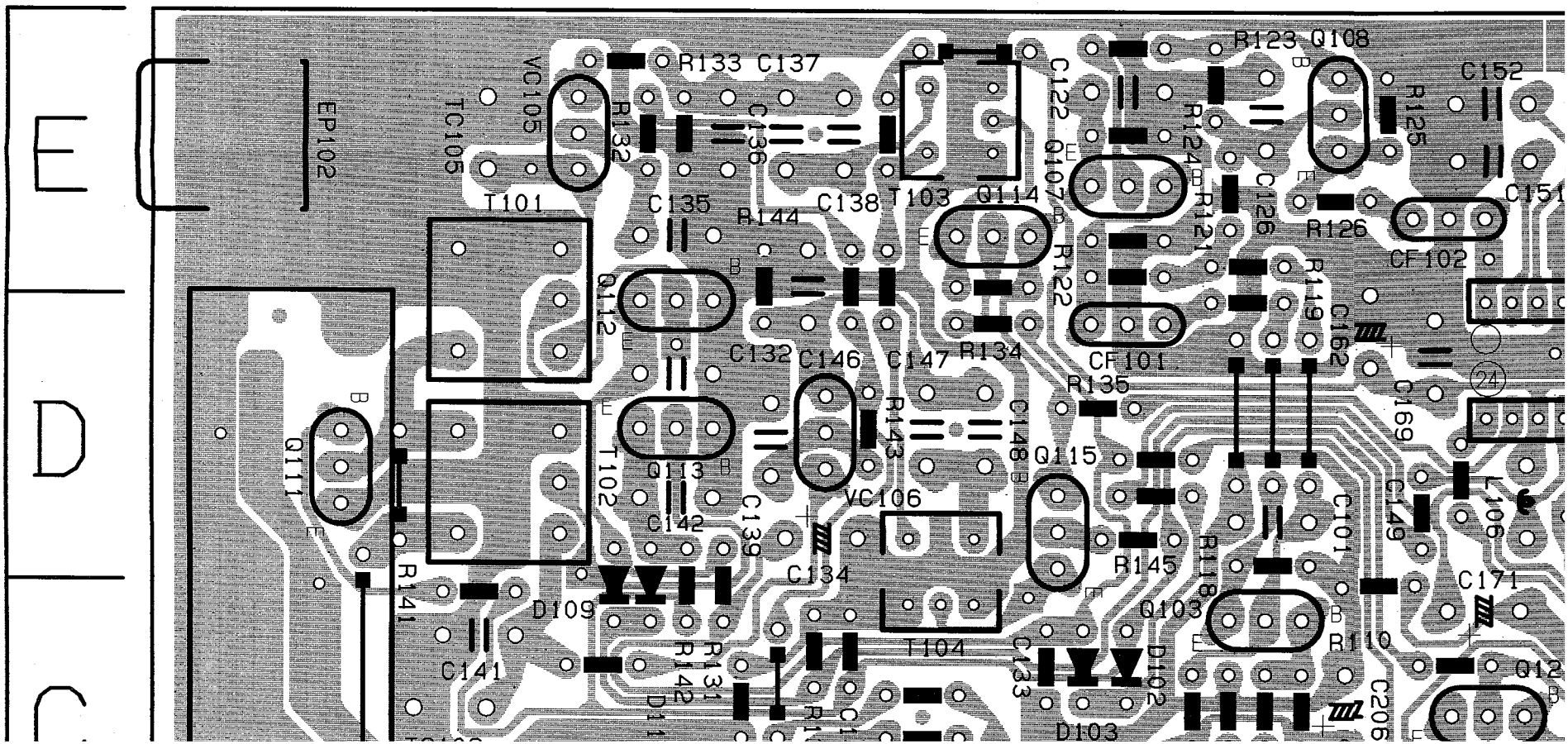
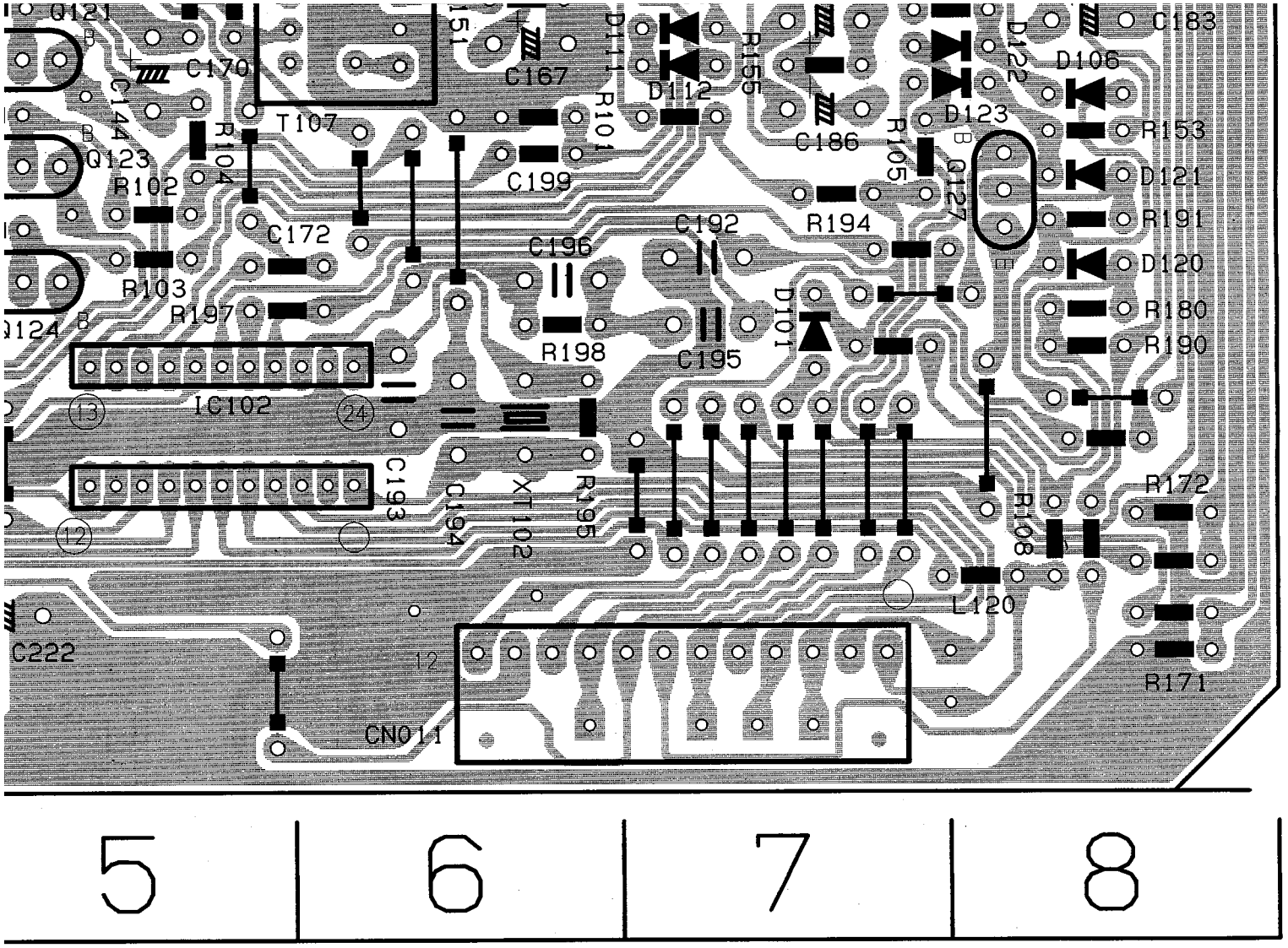
R109
C222
Q124

P1-48-a

■ Tuner P.C. Board (ENA-172)





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C165	6	D
C166	5	D
C167	6	H
C168	5	I
C169	5	I
C170	5	H
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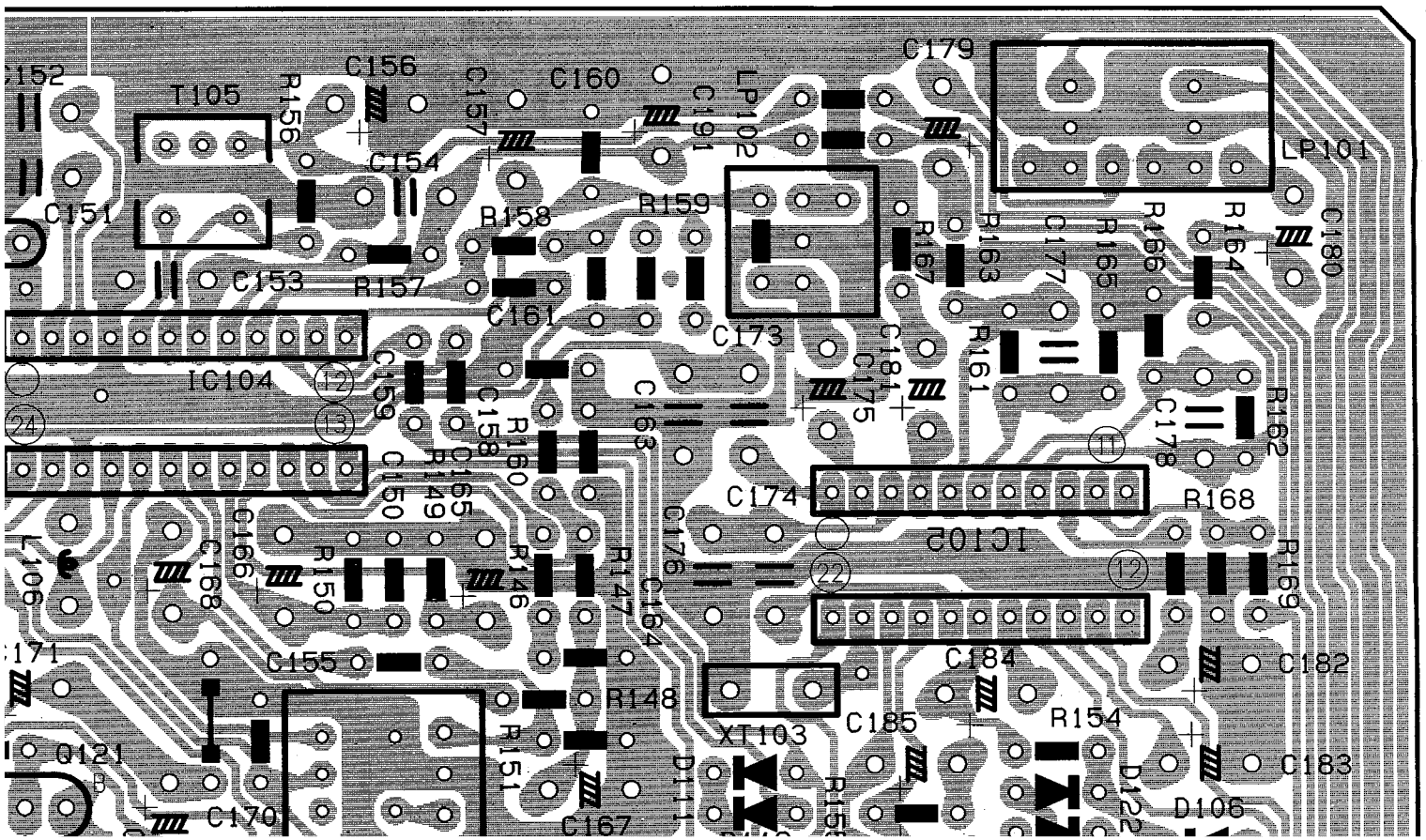
C172	6	G
C173	7	I
C174	7	I
C175	7	I
C176	7	D
C177	8	J
C178	8	D
C179	7	J
C180	8	J
C181	7	I
C182	8	C

D112	7	C
D120	8	G
D121	8	C
D122	7	H
D123	7	C
FE101	2	C
IC102	6	B
IC104	5	D
IC105	7	D
L106	5	D
L120	8	A
LP101	8	E
LP102	7	E
Q103	4	C
Q107	4	E
Q108	4	J
Q111	1	D
Q112	2	I
Q113	2	D
Q114	3	E
Q115	3	D
Q121	5	C
Q123	5	C
Q124	5	B
Q127	8	C
R101	6	H
R102	5	G

R136	3	C
R141	2	C
R142	2	D
R143	3	D
R144	2	E
R145	3	D
R146	6	D
R147	6	D
R148	6	C
R149	6	D
R150	6	D
R151	6	C
R153	8	C
R154	8	C
R155	7	C
R156	5	E
R157	6	E
R158	6	E
R159	6	E
R160	6	I
R161	7	E
R162	8	D
R163	7	E
R164	8	E
R165	8	E
R166	8	E
R167	7	E
R168	8	D
R169	8	D
R171	8	A
R172	8	A
R180	8	B
R181	3	A
R190	8	B

Symbol	X	Y
R191	8	B
R194	7	C
R195	6	B
R197	6	B
R198	6	B
R199	3	A
T101	1	D
T102	1	D
T103	3	E
T104	3	D
T105	5	E
T107	5	C
TC105	2	E
TC106	1	C
XT102	6	B
XT103	7	C



Location List

(ENA-172)

Symbol	X	Y
C101	4	D
C111	4	C
C122	3	E
C126	4	E
C132	2	D
C133	3	C
C134	2	D
C135	2	E
C136	2	E
C137	2	E
C138	3	E
C139	2	D
C141	2	C
C142	2	D
C143	3	C
C144	5	C
C146	3	D
C147	3	D
C148	3	D
C149	4	D
C150	6	D
C151	5	E
C152	5	E
C153	5	E
C154	6	E
C155	6	C
C156	6	E
C157	6	E
C158	6	I
C159	6	D
C160	6	J
C161	6	J
C162	4	D
C163	6	I
C164	6	H
C165	6	D
C166	5	D
C167	6	H
C168	5	I

Symbol	X	Y
C183	8	H
C184	7	H
C185	7	H
C186	7	H
C191	6	E
C192	7	B
C193	6	G
C194	6	G
C195	7	B
C196	6	G
C197	3	G
C198	3	B
C199	6	C
C206	4	H
C222	4	F
C229	3	A
CF101	4	D
CF102	5	J
CN011	6	F
D101	7	B
D102	4	H
D103	3	C
D106	8	C
D109	2	D
D110	2	D
D111	7	H
D112	7	C
D120	8	G
D121	8	C
D122	7	H

Symbol	X	Y
R103	5	B
R104	5	H
R105	7	C
R108	8	A
R109	4	F
R110	4	C
R118	4	D
R119	4	D
R121	3	E
R122	4	E
R123	4	E
R124	3	E
R125	4	E
R126	4	E
R131	2	D
R132	2	E
R133	2	E
R134	3	D
R135	4	D
R136	3	C
R141	2	C
R142	2	D
R143	3	D

< PARTS LIST >

Note : All printed circuit boards and its assemblies are not available as service parts.

Area Suffix	
UB	Hong Kong
US	Singapore
U	Universal Except All of Above

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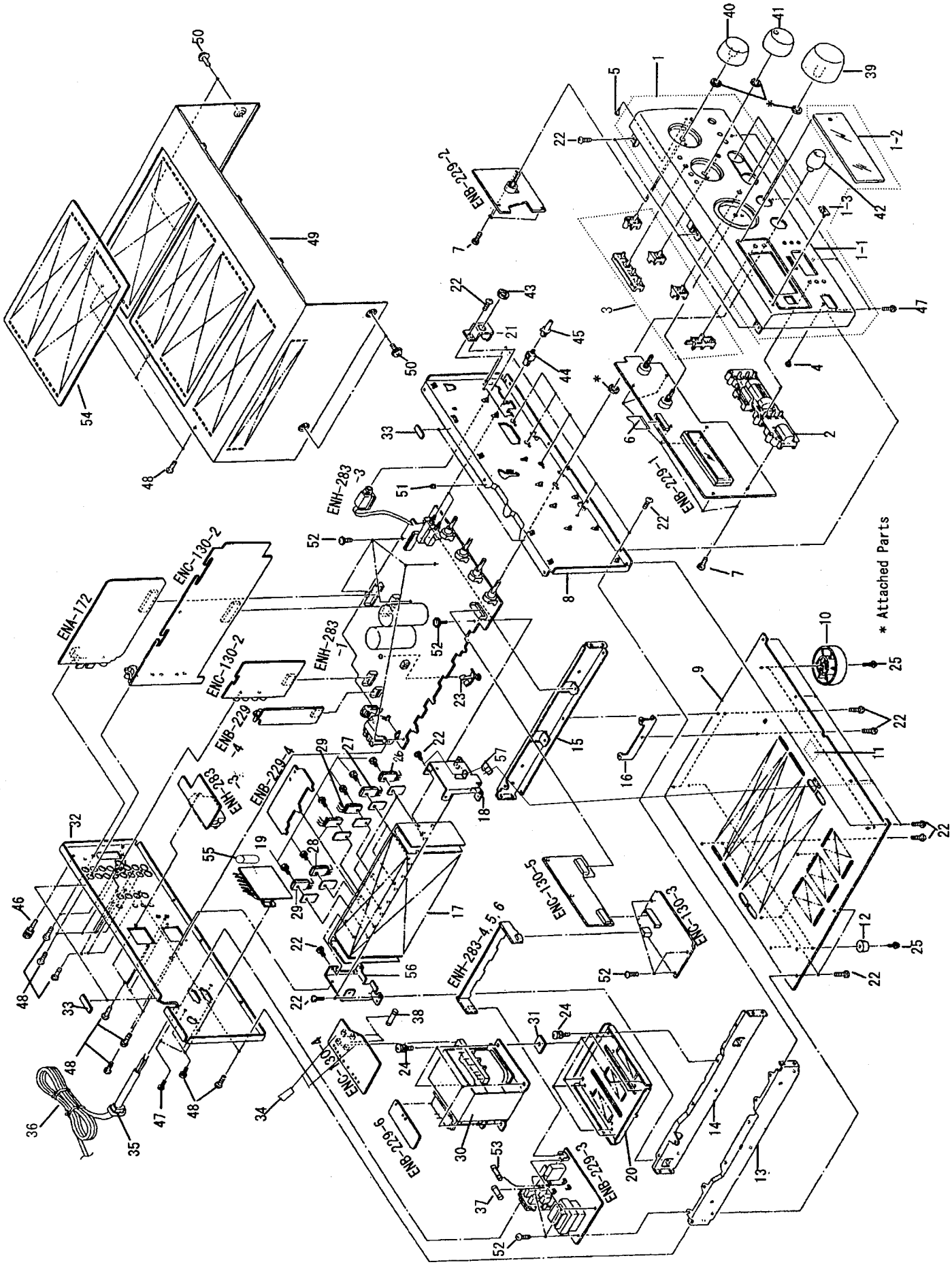
General Exploded View and Parts List



■ Parts List

⚠	No.	Parts Number	Parts Name	Q'ty	Description	Area
	1	EFP-RX718PBK(U)	PRONT PANEL ASS	1		
	1-1	E102909-028SM	FRONT PANEL	1		
	1-2	E309112-019SM	WINDOW SCREEN	1		
	1-3	VJD5429-001	JVC MARK	1		
	2	E208276-001SM	PUSH BUTTON	1	POWER/SURROUND	
	3	E309105-004SM	PUSH BUTTON	1	TUNER/ETC	
	4	FSJD4001-002	INDICATOR LENS	1	POWER	
	5	E408326-001SM	INDICATOR LENS	1	TAPE2 MON	
	6	VWF1235-45PPB	FFC CABLE	1		
	7	SDSF2608Z	SCREW	9		
	8	E102911-003SM	FRONT BRACKET	1		
	9	E102820-002SM	BOTTOM PLATE	1		
	10	VJF4039-00PSM	FOOT ASSY	2	FRONT	
	11	E70115-002	CAUTION LABEL	1		
	12	E47227-036	FOOT	2	REAR	
	13	E208548-001SM	SIDE BRACKET	1	LEFT	
	14	E208549-001SM	CENTER BRACKET	1		
	15	E208081-003SM	SIDE BRACKET	1	RIGHT	
	16	E407984-001SM	P.W.BOARD HOLDER	1		
	17	E309170-004SM	HEAT SINK	1		
	18	E308836-004SM	HEAT SINK BRACKET	1	FRONT	
	19	E73525-003	SCREW	8		
	20	E309459-002SM	TRANSFORMER BRACKET	1		
	21	E407323-002SM	HEADPHONE BRACKET	1		
	22	SBSG3008CC	TAPPING SCREW	26		
	23	E406084-002	FASTENER	1		
	24	E65389-006	SPECIAL SCREW	8		
	25	SBST3010Z	TAPPING SCREW	4		
	26	2SB1429LB(R,O)	SI.TRANSISTOR	2	Q733/Q734	
	27	2SD2155LB(R,O)	SI.TRANSISTOR	2	Q731/Q732	
	28	2SA1633LD(D,E)	SI.TRANSISTOR	1	Q018/Q058	
	29	2SC4278LD(D,E)	SI.TRANSISTOR	1	Q016/Q056	
⚠	30	ETP1200-70FAJ	POWER TRANSFORMER	1		
	31	E406309-002	SPACER	4		
	32	E103041-015SM	REAR PANEL	1		U
	32	E103041-016SM	REAR PANEL	1		UB,US
	33	E306805-146	SPACER	4		
	34	E67132-T2R0	FUSE LABEL	2		
⚠	35	QHS3771-108	CORD STOPPER	1		
⚠	36	QMP39E0-200	POWER CORD	1		US
⚠	36	QMP5530-0085BS	POWER CORD	1		UB
⚠	36	QMP7520-200	POWER CORD	1		U
⚠	37	QMF51A2-8R0	FUSE	1	F001	
⚠	38	QMF51E2-2R0	FUSE	2	F851	
	39	E309823-001SM	VOLUME KNOB	1		
	40	E309110-001SM	SELECT KNOB	1	SOURCE	
	41	E309110-003SM	SELECT KNOB	1	JOG	
	42	E309111-003SM	BALANCE KNOB	4	TONE/BLNCE	
	43	VKZ4150-001	NUT	1		
	44	E407983-001SM	PUSH SHAFT	2		
	45	E407321-002SM	PUSH BUTTON	2		
	46	E409257-001	GND TERMINAL	1		
	47	SDSG3008M	TAPPING SCREW	4		

■ Parts List

⚠	No.	Parts Number	Parts Name	Q'ty	Description	Area
	47	SDSG3008M	TAPPING SCREW	2	AC OUTLET	U
	48	E73273-003	SPECIAL SCREW	24		
	49	E207378-025SM	METAL COVER	1		
	50	E61660-004	SPECIAL SCREW	4		
	51	E306805-028	SPACER	1		
	52	GBSG3008CC	TAPPING SCREW	13		
⚠	53	QMF51A2-R10S	FUSE	1	F002	
	54	E208294-001	PROTECTOR COVER	1		
⚠	55	QMF51E2-4R0	FUSE	1	F004	
	56	E308836-003SM	HEAT SINK BRACKET	1	REAR	
	57	E68587-010	BRACKET	1		
	-	E75139-003	Z LABEL	1		U

■ Electrcal Parts List (ENB-172)

⚠	No.	Parts Number	Description	Area
		I.C.S		
	IC102	LC72131	I.C(M)	
	IC104	LA1266A	I.C(MONO-ANALOG)	
	IC105	LA3401	I.C(MONO-ANALOG)	
		DIODES		
	D101	1SS133	SI.DIODE	
	D106	1SS133	SI.DIODE	
	D111	1SS133	SI.DIODE	
	D112	1SS133	SI.DIODE	
	D120	1SS133	SI.DIODE	
	D121	1SS133	SI.DIODE	
	D122	1SS133	SI.DIODE	
	D123	1SS133	SI.DIODE	
	VC105	SVC342(L)	VARI-CAPA DIODE	
		TRANSISTORS		
	Q103	2SC461	SI.TRANSISTOR	
	Q107	2SC535	SI.TRANSISTOR	
	Q108	2SC461	SI.TRANSISTOR	
	Q112	2SK301(P,Q)	F.E.T.	
	Q123	DTA144ES	DIGITAL TRANSISTOR	
	Q124	DTA144ES	DIGITAL TRANSISTOR	
	Q127	DTC144ES	DIGITAL TRANSISTOR	
		CAPACITORS		
	C101	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C122	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C126	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C132	QCS31HJ-561Z	560PF 50V CER.CAP.	
	C133	QCHB1EZ-223	0.022MF 25V CER.CAP.	
	C134	QETB1EM-106	10MF 25V AL E.CAP.	
	C135	QCC21EM-223	0.022MF 25V CER.CAP.	
	C136	QCT25CH-180Z	18PF 50V CER.CAP.	
	C137	QCT26CH-221	220PF 50V CER.CAP.	
	C138	QCT26CH-241	240PF 50V CER.CAP.	
	C149	QCHB1EZ-223	0.022MF 25V CER.CAP.	
	C150	QCHB1EZ-223	0.022MF 25V CER.CAP.	
	C151	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C152	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C153	QCC21EM-223	0.022MF 25V CER.CAP.	
	C154	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C155	QCHB1EZ-223	0.022MF 25V CER.CAP.	
	C156	QETB1CM-227	220MF 16V AL E.CAP.	
	C157	QETB1HM-474	0.47MF 50V E.CAP.	
	C158	QCBB1HK-101Y	100PF 50V CER.CAP.	
	C159	QCBB1HK-101Y	100PF 50V CER.CAP.	
	C160	QCBB1HK-221Y	220PF 50V CER.CAP.	
	C161	QCHB1EZ-223	0.022MF 25V CER.CAP.	
	C162	QETB1EM-106	10MF 25V AL E.CAP.	
	C163	QFLB1HJ-102	1000PF 50V MYLAR CAP.	
	C164	QCHB1EZ-223	0.022MF 25V CER.CAP.	
	C165	QETB1HM-474	0.47MF 50V E.CAP.	
	C166	QETB1HM-225	2.2MF 50V AL E.CAP.	
	C167	QETB1HM-225	2.2MF 50V AL E.CAP.	
	C168	QEK51HM-475	4.7MF 50V AL E.CAP.	

⚠	No.	Parts Number	Description	Area
	C169	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C170	QCHB1EZ-223	0.022MF 25V CER.CAP.	
	C171	QEK51EM-106	10MF 25V AL E.CAP.	
	C172	QCVB1CM-103Y	0.01MF 16V CER.CAP.	
	C173	QFLB1HJ-393	0.039MF 50V MYLAR CAP.	
	C174	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	
	C175	QETB1EM-106	10MF 25V AL E.CAP.	
	C176	QCY31HK-102Z	1000PF 50V CER.CAP.	
	C177	QCS31HJ-821Z	820PF 50V CER.CAP.	
	C178	QCS31HJ-821Z	820PF 50V CER.CAP.	
	C179	QETB1HM-225	2.2MF 50V AL E.CAP.	
	C180	QETB1HM-225	2.2MF 50V AL E.CAP.	
	C181	QETB1EM-106	10MF 25V AL E.CAP.	
	C182	QETB1HM-225	2.2MF 50V AL E.CAP.	
	C183	QETB1HM-105	1MF 50V AL E.CAP.	
	C184	QETB1HM-105	1MF 50V AL E.CAP.	
	C185	QEK51HM-225G	2.2MF 50V AL E.CAP.	
	C186	QETB1HM-474	0.47MF 50V E.CAP.	
	C191	QETB1HM-475E	4.7MF 50V E.CAP.	
	C192	QCC21EM-473	0.047MF 25V CER.CAP.	
	C193	QCS21HJ-180A	18PF 50V CER.CAP.	
	C194	QCS21HJ-180A	18PF 50V CER.CAP.	
	C195	QFV71HJ-474ZM	0.47MF 50V THIN FILM	
	C196	QCY31HK-102Z	1000PF 50V CER.CAP.	
	C197	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C198	QCF21HP-103A	0.01MF 50V CER.CAP.	
	C199	QCVB1CM-103Y	0.01MF 16V CER.CAP.	
	C222	QETB1CM-477M	470MF 16V E.CAP.	
	C229	QETB1CM-227	220MF 16V AL E.CAP.	
	TC105	ENZ1003-006	00MF TRIMMER CA	
		RESISTORS		
	R101	QRD161J-103	10K 1/6W CARBON RE	
	R102	QRD161J-103	10K 1/6W CARBON RE	
	R103	QRD161J-103	10K 1/6W CARBON RE	
	R105	QRD161J-103	10K 1/6W CARBON RE	
	R108	QRD161J-103	10K 1/6W CARBON RE	
⚠	R109	QRD14CJ-680SX	68 1/4W UNF.CARBON	
	R118	QRD167J-332	3.3K 1/6W CARBON RE	
	R119	QRD161J-221	220 1/6W CARBON RE	
	R121	QRD161J-391	390 1/6W CARBON RE	
	R122	QRD167J-272	2.7K 1/6W CARBON RE	
	R123	QRD161J-102	1K 1/6W CARBON RE	
	R124	QRD161J-681	680 1/6W CARBON RE	
	R125	QRD167J-332	3.3K 1/6W CARBON RE	
	R126	QRD161J-221	220 1/6W CARBON RE	
	R131	QRD161J-331	330 1/6W CARBON RE	
	R132	QRD161J-103	10K 1/6W CARBON RE	
	R133	QRD161J-473	47K 1/6W CARBON RE	
	R135	QRD161J-470	47 1/6W CARBON RE	
	R136	QRD161J-103	10K 1/6W CARBON RE	
	R146	QRD167J-560	56 1/6W CARBON RE	
	R147	QRD161J-103	10K 1/6W CARBON RE	
	R148	QRD161J-103	10K 1/6W CARBON RE	

■ Electrcal Parts List (ENB-172)

⚠	No.	Parts Number	Description	Area
	R149	QRD161J-273	27K 1/6W CARBON RE	
	R150	QRD161J-103	10K 1/6W CARBON RE	
	R151	QRD161J-222	2.2K 1/6W CARBON RE	
	R153	QRD161J-103	10K 1/6W CARBON RE	
	R154	QRD161J-103	10K 1/6W CARBON RE	
	R155	QRD167J-562	5.6K 1/6W CARBON RE	
	R156	QRD167J-822	8.2K 1/6W CARBON RE	
	R157	QRD161J-103	10K 1/6W CARBON RE	
	R158	QRD161J-273	27K 1/6W CARBON RE	
	R159	QRD161J-561	560 1/6W CARBON RE	
	R160	QRD167J-562	5.6K 1/6W CARBON RE	
	R161	QRD161J-823	82K 1/6W CARBON RE	
	R162	QRD161J-823	82K 1/6W CARBON RE	
	R163	QRD161J-472	4.7K 1/6W CARBON RE	
	R164	QRD161J-472	4.7K 1/6W CARBON RE	
	R165	QRD161J-184	180K 1/6W CARBON RE	
	R166	QRD161J-184	180K 1/6W CARBON RE	
	R167	QRD161J-393	39K 1/6W CARBON RE	
	R168	QRD161J-103	10K 1/6W CARBON RE	
	R169	QRD161J-103	10K 1/6W CARBON RE	
	R171	QRD167J-682	6.8K 1/6W CARBON RE	
	R172	QRD167J-682	6.8K 1/6W CARBON RE	
	R180	QRD161J-103	10K 1/6W CARBON RE	
	R181	QRD161J-222	2.2K 1/6W CARBON RE	
	R190	QRD161J-103	10K 1/6W CARBON RE	
	R191	QRD167J-562	5.6K 1/6W CARBON RE	
	R194	QRD161J-103	10K 1/6W CARBON RE	
	R195	QRD161J-473	47K 1/6W CARBON RE	
	R197	QRD161J-222	2.2K 1/6W CARBON RE	
	R198	QRD167J-822	8.2K 1/6W CARBON RE	
	R199	QRD161J-472	4.7K 1/6W CARBON RE	
		OTHERS		
		EMW10604-003	PRINTED BOARD	
	L106	EQL3001-102K	INDUCTOR	
	L120	EQL4007-1R0	INDUCTOR	
	T101	EQR1111-014	RF COIL	
	T103	EQR1207-017	RF COIL	
	T105	EQT2140-017	I.F.TRANSFORMER	
	T107	ECB1560-010	CERAMIC FILTER	
	AT101	FMMB10YV-401K	ANTENNA TERMINAL	
	CF101	ECB2123-006R	CERAMIC FILTER	
	CF102	ECB2123-006R	CERAMIC FILTER	
	CN011	EMV5163-012R	CONNECT TERMINAL	
	FE101	EAF2203-004	FRONT END	
	LP101	EQF0101-002	LOWPASS FILTER	
	XT102	ECX0007-200KWJ1	CRYSTAL	
	XT103	ECX0000-456KR	CERAMIC RESONATOR	

■ Electrical Parts List (ENB-229)

⚠	No.	Parts Number	Description	Area
		I.C.S		
	IC511	BA15218N	I.C(MONO-ANALOG)	
	IC901	TA7317P	I.C(MONO-ANALOG)	
		DIODES		
	D010	1SS133	SI.DIODE	
	D011	MTZ18JC	ZENER DIODE	
	D012	1SS133	SI.DIODE	
	D013	1SS133	SI.DIODE	
	D014	1SS133	SI.DIODE	
	D015	1SS133	SI.DIODE	
	D021	1SS133	SI.DIODE	
	D022	1SS133	SI.DIODE	
	D482	1SS133	SI.DIODE	
	D483	1SS133	SI.DIODE	
	D484	MTZ6.2JC	ZENER DIODE	
	D701	1SS133	SI.DIODE	
	D702	1SS133	SI.DIODE	
	D703	1SS133	SI.DIODE	
	D704	1SS133	SI.DIODE	
	D705	MTZ18JC	ZENER DIODE	
	D709	1SS133	SI.DIODE	
	D710	1SS133	SI.DIODE	
	D711	1SS133	SI.DIODE	
	D712	1SS133	SI.DIODE	
	D713	MTZ20JC	ZENER DIODE	
	D714	MTZ20JC	ZENER DIODE	
	D811	1SS133	SI.DIODE	
	D812	MTZ16JC	ZENER DIODE	
	D813	1SS133	SI.DIODE	
	D814	MTZ6.8JC	ZENER DIODE	
	D815	1SS133	SI.DIODE	
	D816	MTZ16JC	ZENER DIODE	
	D817	1SS133	SI.DIODE	
	D818	1SS133	SI.DIODE	
	D819	MTZ13JC	ZENER DIODE	
	D820	MTZ5.1JC	ZENER DIODE	
	D901	1SS133	SI.DIODE	
	D902	1SS133	SI.DIODE	
	D903	1SS133	SI.DIODE	
		TRANSISTORS		
	Q011	2SC2240(BL)	SI.TRANSISTOR	
	Q012	2SC2240(BL)	SI.TRANSISTOR	
	Q013	2SA1038(R,S)	SI.TRANSISTOR	
	Q015	2SC2235(O,Y)	SI.TRANSISTOR	
	Q017	2SA965(Y)	SI.TRANSISTOR	
	Q019	2SC1775AV(F1)	SI.TRANSISTOR	
	Q020	DTC123YS	SI.TRANSISTOR	
	Q021	2SC2389(S,E)	SI.TRANSISTOR	
	Q022	2SA1038(R,S)	SI.TRANSISTOR	
	Q701	2SC1775AV(F1)	SI.TRANSISTOR	
	Q702	2SC1775AV(F1)	SI.TRANSISTOR	
	Q703	2SC1775AV(F1)	SI.TRANSISTOR	
	Q704	2SC1775AV(F1)	SI.TRANSISTOR	

⚠	No.	Parts Number	Description	Area
	Q705	2SA1038(R,S)	SI.TRANSISTOR	
	Q706	2SA1038(R,S)	SI.TRANSISTOR	
	Q707	2SA933LN(R,S)	SI.TRANSISTOR	
	Q708	2SA933LN(R,S)	SI.TRANSISTOR	
	Q709	2SA1038(R,S)	SI.TRANSISTOR	
	Q710	2SA1038(R,S)	SI.TRANSISTOR	
	Q711	2SC2389(S,E)	SI.TRANSISTOR	
	Q712	2SC2389(S,E)	SI.TRANSISTOR	
	Q717	2SC2389(S,E)	SI.TRANSISTOR	
	Q718	2SC2389(S,E)	SI.TRANSISTOR	
	Q719	2SA1038(R,S)	SI.TRANSISTOR	
	Q720	2SA1038(R,S)	SI.TRANSISTOR	
	Q721	2SD636	SI.TRANSISTOR	
	Q722	2SD636	SI.TRANSISTOR	
	Q723	2SC2389(S,E)	SI.TRANSISTOR	
	Q724	2SC2389(S,E)	SI.TRANSISTOR	
	Q725	2SA1038(R,S)	SI.TRANSISTOR	
	Q726	2SA1038(R,S)	SI.TRANSISTOR	
	Q727	2SC2235(O,Y)	SI.TRANSISTOR	
	Q728	2SC2235(O,Y)	SI.TRANSISTOR	
	Q729	2SA965(Y)	SI.TRANSISTOR	
	Q730	2SA965(Y)	SI.TRANSISTOR	
	Q735	2SD2061(F,G)	SI.TRANSISTOR	
	Q736	2SC2240(GR,BL)	SI.TRANSISTOR	
	Q801	2SB1187(F,G)	SI.TRANSISTOR	
	Q803	2SD2061(F,G)	SI.TRANSISTOR	
	Q804	2SD2061(F,G)	SI.TRANSISTOR	
	Q805	2SD2061(F,G)	SI.TRANSISTOR	
	Q901	2SC2389(S,E)	SI.TRANSISTOR	
	Q902	2SC2389(S,E)	SI.TRANSISTOR	
	Q903	2SA1038(R,S)	SI.TRANSISTOR	
		CAPACITORS		
	C010	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C011	QETB1HM-106	10MF 50V E.CAP.	
	C012	QCS21HJ-271A	270PF 50V CER.CAP.	
	C013	QETB1EM-106	10MF 25V AL E.CAP.	
	C014	QCS21HJ-101A	100PF 50V CER.CAP.	
	C015	QCS21HJ-5R0	5PF 50V CER.CAP.	
	C016	QETB1CM-476	47MF 16V AL E.CAP.	
	C017	QCS22HJ-330	33PF 500V CER.CAP.	
	C018	QFLB1HJ-103	0.01MF 50V MYLAR CAP.	
	C019	QETB1HM-476	47MF 50V E.CAP.	
	C020	QCS22HJ-470A	47PF 500V CER.CAP.	
	C021	QETB1HM-225	2.2MF 50V AL E.CAP.	
	C023	QCS22HJ-470A	47PF 500V CER.CAP.	
	C024	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	
	C025	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	
	C026	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C027	QCY31HK-332Z	3300PF 50V CER.CAP.	
	C028	QCY31HK-332Z	3300PF 50V CER.CAP.	
	C064	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	
	C065	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	
	C481	QCBB1HK-331Y	330PF 50V CER.CAP.	

■ Electrical Parts List (ENB-229)

⚠	No.	Parts Number	Description	Area
	C482	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C501	QETB1HM-105	1MF 50V AL E. CAP.	
	C502	QETB1HM-105	1MF 50V AL E. CAP.	
	C503	QFLB1HJ-823	0.082MF 50V MYLAR CAP.	
	C504	QFLB1HJ-823	0.082MF 50V MYLAR CAP.	
	C505	QFLB1HJ-153	0.015MF 50V MYLAR CAP.	
	C506	QFLB1HJ-153	0.015MF 50V MYLAR CAP.	
	C507	QETB1HM-105	1MF 50V AL E. CAP.	
	C508	QETB1HM-105	1MF 50V AL E. CAP.	
	C509	QFLB1HJ-332	3300PF 50V MYLAR CAP.	
	C510	QFLB1HJ-332	3300PF 50V MYLAR CAP.	
	C511	QFLB1HJ-183	0.018MF 50V MYLAR CAP.	
	C512	QFLB1HJ-183	0.018MF 50V MYLAR CAP.	
	C521	QETB1HM-106	10MF 50V E. CAP.	
	C522	QCY31HK-103Z	0.01MF 50V CER. CAP.	
	C523	QFLB1HJ-123	0.012MF 50V MYLAR CAP.	
	C524	QETB1HM-106	10MF 50V E. CAP.	
	C525	QCS21HJ-101A	100PF 50V CER. CAP.	
	C701	QETB1HM-106	10MF 50V E. CAP.	
	C702	QETB1HM-106	10MF 50V E. CAP.	
	C703	QCS21HJ-271A	270PF 50V CER. CAP.	
	C704	QCS21HJ-271A	270PF 50V CER. CAP.	
	C705	QCS21HJ-101A	100PF 50V CER. CAP.	
	C706	QCS21HJ-101A	100PF 50V CER. CAP.	
	C707	QETB1CM-476	47MF 16V AL E. CAP.	
	C708	QETB1CM-476	47MF 16V AL E. CAP.	
	C709	QCS21HJ-100	10PF 50V CER. CAP.	
	C710	QCS21HJ-100	10PF 50V CER. CAP.	
	C711	QCY31HK-152Z	1500PF 50V CER. CAP.	
	C712	QCY31HK-152Z	1500PF 50V CER. CAP.	
	C713	QCS21HJ-680A	68PF 50V CER. CAP.	
	C714	QCS21HJ-680A	68PF 50V CER. CAP.	
	C715	QCS21HJ-680A	68PF 50V CER. CAP.	
	C716	QCS21HJ-680A	68PF 50V CER. CAP.	
	C717	QCS22HJ-220	22PF 500V CER. CAP.	
	C718	QCS22HJ-220	22PF 500V CER. CAP.	
	C719	QFLB1HJ-472	4700PF 50V MYLAR CAP.	
	C720	QFLB1HJ-472	4700PF 50V MYLAR CAP.	
	C722	QETB1EM-476	47MF 25V AL E. CAP.	
	C723	QETB2AM-476	47MF 100V AL E. CAP.	
	C724	QETB2AM-476	47MF 100V AL E. CAP.	
	C725	QCS22HJ-470A	47PF 500V CER. CAP.	
	C726	QCS22HJ-470A	47PF 500V CER. CAP.	
	C727	QCS22HJ-470A	47PF 500V CER. CAP.	
	C728	QCS22HJ-470A	47PF 500V CER. CAP.	
	C729	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	
	C730	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	
	C731	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	
	C732	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	
	C733	QCF21HP-472	4700PF 50V CER. CAP.	
	C734	QCF21HP-472	4700PF 50V CER. CAP.	
	C735	QCF21HP-472	4700PF 50V CER. CAP.	
	C736	QCF21HP-472	4700PF 50V CER. CAP.	

⚠	No.	Parts Number	Description	Area
	C741	QCF21HP-472	4700PF 50V CER. CAP.	
	C801	EEW7103-109T	10000MF AL E. CAP.	
	C802	EEW7103-109T	10000MF AL E. CAP.	
	C812	QETB1EM-107	100MF 25V AL E. CAP.	
	C814	QETB1EM-107	100MF 25V AL E. CAP.	
	C816	QETB1EM-107	100MF 25V AL E. CAP.	
	C819	QETB1EM-107	100MF 25V AL E. CAP.	
	C820	QETB1EM-107	100MF 25V AL E. CAP.	
	C901	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C902	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C903	QETB1HM-226E	22MF 50V E. CAP.	
	C904	QCF21HP-103A	0.01MF 50V CER. CAP.	
	C905	QCY31HK-102Z	1000PF 50V CER. CAP.	
	C906	QETB1AM-476	47MF 10V E. CAP.	
	C909	QETB1CM-226	22MF 16V E. CAP.	
		RESISTORS		
	R011	QRD161J-222	2.2K 1/6W CARBON RE	
	R012	QRD161J-104	100K 1/6W CARBON RE	
	R013	QRD161J-123	12K 1/6W CARBON RE	
	R014	QRD161J-162	1.6K 1/6W CARBON RE	
	R015	QRD161J-104	100K 1/6W CARBON RE	
⚠	R016	QRD14CJ-181S	180 1/4W UNF. CARBON	
⚠	R017	QRD14CJ-332SX	3.3K 1/4W UNF. CARBON	
	R018	QRD167J-332	3.3K 1/6W CARBON RE	
	R019	QRD167J-332	3.3K 1/6W CARBON RE	
	R020	QRD167J-332	3.3K 1/6W CARBON RE	
⚠	R023	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R024	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R025	QRD14CJ-561SX	560 1/4W UNF. CARBON	
⚠	R026	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R027	QRD14CJ-100SX	10 1/4W UNF. CARBON	
	R028	QRD161J-391	390 1/6W CARBON RE	
	R029	ERT-D2WHL202S	2K 1/4W NEGATIVE T	
	R030	QRD161J-183	18K 1/6W CARBON RE	
	R031	QRD161J-123	12K 1/6W CARBON RE	
⚠	R032	QRD125J-330	33 1/2W UNF. CARBON	
⚠	R033	QRG022J-100A	10 2W OXIDE META	
	R034	QRD161J-104	100K 1/6W CARBON RE	
⚠	R035	QRD14CJ-182SX	1.8K 1/4W UNF. CARBON	
⚠	R036	QRD14CJ-182SX	1.8K 1/4W UNF. CARBON	
⚠	R037	QRG022J-562A	5.6K 2W OXIDE META	
	R038	QRD167J-751	750 1/6W CARBON RE	
⚠	R039	QRD14CJ-100SX	10 1/4W UNF. CARBON	
	R040	QRD161J-3R3	3.3 1/6W CARBON RE	
	R043	QRD161J-102	1K 1/6W CARBON RE	
	R045	QRD167J-151	150 1/6W CARBON RE	
	R046	QRD167J-151	150 1/6W CARBON RE	
	R047	QRD167J-151	150 1/6W CARBON RE	
	R048	QRD167J-151	150 1/6W CARBON RE	
⚠	R073	QRG022J-100A	10 2W OXIDE META	
	R074	QRD161J-104	100K 1/6W CARBON RE	
	R481	QRD161J-100	10 1/6W CARBON RE	
	R482	QRD161J-102	1K 1/6W CARBON RE	

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⚠	No.	Parts Number	Description	Area
	R501	QRD161J-203	20K 1/6W CARBON RE	
	R502	QRD161J-203	20K 1/6W CARBON RE	
	R503	QRD161J-362	3.6K 1/6W CARBON RE	
	R504	QRD161J-362	3.6K 1/6W CARBON RE	
	R505	QRD161J-472	4.7K 1/6W CARBON RE	
	R506	QRD161J-472	4.7K 1/6W CARBON RE	
	R507	QRD161J-122	1.2K 1/6W CARBON RE	
	R508	QRD161J-122	1.2K 1/6W CARBON RE	
	R521	QRD161J-104	100K 1/6W CARBON RE	
	R522	QRD161J-203	20K 1/6W CARBON RE	
	R523	QRD161J-183	18K 1/6W CARBON RE	
	R524	QRD161J-202	2K 1/6W CARBON RE	
	R525	QRD167J-223	22K 1/6W CARBON RE	
	R526	QRD161J-132	1.3K 1/6W CARBON RE	
	R528	QRD161J-203	20K 1/6W CARBON RE	
⚠	R529	QRZ0077-680	68 1/4W FUSIBLE RE	
⚠	R530	QRZ0077-680	68 1/4W FUSIBLE RE	
	R701	QRD161J-222	2.2K 1/6W CARBON RE	
	R702	QRD161J-222	2.2K 1/6W CARBON RE	
	R703	QRD161J-104	100K 1/6W CARBON RE	
	R704	QRD161J-104	100K 1/6W CARBON RE	
	R705	QRD161J-202	2K 1/6W CARBON RE	
	R706	QRD161J-202	2K 1/6W CARBON RE	
	R707	QRD161J-202	2K 1/6W CARBON RE	
	R708	QRD161J-202	2K 1/6W CARBON RE	
	R709	QRD167J-822	8.2K 1/6W CARBON RE	
	R710	QRD167J-822	8.2K 1/6W CARBON RE	
	R711	QRD161J-821	820 1/6W CARBON RE	
	R712	QRD161J-821	820 1/6W CARBON RE	
	R713	QRD161J-133Y	13K 1/6W CARBON RE	
	R714	QRD161J-133Y	13K 1/6W CARBON RE	
	R715	QRD161J-823	82K 1/6W CARBON RE	
	R716	QRD161J-823	82K 1/6W CARBON RE	
	R717	QRD12CJ-153SX	15K 1/2W UNF. CARBON	
	R718	QRD12CJ-153SX	15K 1/2W UNF. CARBON	
	R719	QRD161J-391	390 1/6W CARBON RE	
	R720	QRD161J-391	390 1/6W CARBON RE	
	R721	QRD14CJ-151SX	150 1/4W UNF. CARBON	
	R722	QRD14CJ-151SX	150 1/4W UNF. CARBON	
	R723	QRD167J-152	1.5K 1/6W CARBON RE	
	R724	QRD167J-152	1.5K 1/6W CARBON RE	
	R725	QRD161J-333	33K 1/6W CARBON RE	
	R726	QRD161J-333	33K 1/6W CARBON RE	
	R727	QRD161J-391	390 1/6W CARBON RE	
	R728	QRD161J-391	390 1/6W CARBON RE	
	R729	QRD161J-391	390 1/6W CARBON RE	
	R730	QRD161J-391	390 1/6W CARBON RE	
	R731	QRD161J-101	100 1/6W CARBON RE	
	R732	QRD161J-101	100 1/6W CARBON RE	
⚠	R733	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R734	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R735	QRG022J-562A	5.6K 2W OXIDE META	
	R739	QRD161J-201	200 1/6W CARBON RE	

⚠	No.	Parts Number	Description	Area
	R740	QRD161J-201	200 1/6W CARBON RE	
	R741	QRD161J-201	200 1/6W CARBON RE	
	R742	QRD161J-201	200 1/6W CARBON RE	
	R751	QRD161J-391	390 1/6W CARBON RE	
	R752	QRD161J-391	390 1/6W CARBON RE	
	R753	QRD161J-391	390 1/6W CARBON RE	
	R754	QRD161J-391	390 1/6W CARBON RE	
	R755	QRD167J-152	1.5K 1/6W CARBON RE	
	R756	QRD167J-152	1.5K 1/6W CARBON RE	
	R761	QRD161J-391	390 1/6W CARBON RE	
	R762	QRD161J-391	390 1/6W CARBON RE	
	R763	ERT-D2WHL202S	2K 1/4W NEGATIVE T	
	R764	ERT-D2WHL202S	2K 1/4W NEGATIVE T	
⚠	R765	QRD14CJ-272S	2.7K 1/4W UNF. CARBON	
⚠	R766	QRD14CJ-272S	2.7K 1/4W UNF. CARBON	
⚠	R767	QRD14CJ-271S	270 1/4W UNF. CARBON	
⚠	R768	QRD14CJ-271S	270 1/4W UNF. CARBON	
⚠	R769	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R770	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R771	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R772	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R773	ERF032K-R22	0.22 3W CEM. RES.	
⚠	R774	ERF032K-R22	0.22 3W CEM. RES.	
⚠	R775	QRD129J-470	47 1/2W UNF. CARBON	
⚠	R776	QRD129J-470	47 1/2W UNF. CARBON	
⚠	R777	QRG022J-100A	10 2W OXIDE META	
⚠	R778	QRG022J-100A	10 2W OXIDE META	
⚠	R779	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R780	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R781	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R782	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R783	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R784	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R785	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R786	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R787	QRD14CJ-562SX	5.6K 1/4W UNF. CARBON	
	R788	QRD161J-103	10K 1/6W CARBON RE	
	R789	QRD161J-473	47K 1/6W CARBON RE	
	R791	QRD161J-222	2.2K 1/6W CARBON RE	
	R792	QRD161J-222	2.2K 1/6W CARBON RE	
⚠	R799	ERF032K-R22	0.22 3W CEM. RES.	
	R801	QRD161J-104	100K 1/6W CARBON RE	
	R802	QRD161J-104	100K 1/6W CARBON RE	
⚠	R811	QRD14CJ-120SX	12 1/4W UNF. CARBON	
⚠	R813	QRD14CJ-122SX	1.2K 1/4W UNF. CARBON	
⚠	R819	QRD14CJ-100SX	10 1/4W UNF. CARBON	
⚠	R822	QRD14CJ-272S	2.7K 1/4W UNF. CARBON	
⚠	R823	QRD14CJ-220S	22 1/4W UNF. CARBON	
⚠	R825	QRD14CJ-332SX	3.3K 1/4W UNF. CARBON	
⚠	R826	QRD14CJ-120SX	12 1/4W UNF. CARBON	
	R828	QRD12CJ-153SX	15K 1/2W UNF. CARBON	
⚠	R834	QRD14CJ-100SX	10 1/4W UNF. CARBON	
	R835	QRD12CJ-471SX	470 1/2W UNF. CARBON	

■ Electrical Parts List (ENB-229)

⚠	No.	Parts Number	Description	Area
⚠	R838	QRD12CJ-2R2SX	2.2 1/2W CARBON RE	
⚠	R843	QRD14CJ-100SX	10 1/4W UNF. CARBON	
	R863	QRD161J-102	1K 1/6W CARBON RE	
	R864	QRD161J-102	1K 1/6W CARBON RE	
	R901	QRD161J-102	1K 1/6W CARBON RE	
	R902	QRD161J-102	1K 1/6W CARBON RE	
	R903	QRD167J-562	5.6K 1/6W CARBON RE	
	R904	QRD167J-562	5.6K 1/6W CARBON RE	
	R905	QRD161J-123	12K 1/6W CARBON RE	
	R906	QRD161J-123	12K 1/6W CARBON RE	
	R907	QRD161J-102	1K 1/6W CARBON RE	
	R908	QRD161J-102	1K 1/6W CARBON RE	
	R909	QRD161J-103	10K 1/6W CARBON RE	
	R911	QRD167J-332	3.3K 1/6W CARBON RE	
	R912	QRD161J-473	47K 1/6W CARBON RE	
	R913	QRD161J-104	100K 1/6W CARBON RE	
	R914	QRD161J-823	82K 1/6W CARBON RE	
	R915	QRD161J-823	82K 1/6W CARBON RE	
	R916	QRD161J-563	56K 1/6W CARBON RE	
	R917	QRD161J-683	68K 1/6W CARBON RE	
	R918	QRD161J-392	3.9K 1/6W CARBON RE	
	R921	QRD161J-224	220K 1/6W CARBON RE	
	R922	QRD167J-562	5.6K 1/6W CARBON RE	
	R924	QRD161J-3R3	3.3 1/6W CARBON RE	
⚠	R929	QRD14CJ-470SX	47 1/4W UNF. CARBON	
⚠	R941	QRG022J-471A	470 2W OXIDE META	
⚠	R942	QRG022J-471A	470 2W OXIDE META	
	R951	QRD161J-333	33K 1/6W CARBON RE	
	R952	QRD161J-333	33K 1/6W CARBON RE	
	R953	QRD161J-333	33K 1/6W CARBON RE	
	R956	QRD161J-391	390 1/6W CARBON RE	
	R957	QRD167J-223	22K 1/6W CARBON RE	
	VR511	QVDB96C-E15CJ3	100K VARIABLE R	
	VR512	QVDB96C-E15CJ3	100K VARIABLE R	
	VR513	QVDA96W-E15DJ3	100K VARIABLE R	
	VR514	QVDB96C-E15DJ3	100K VARIABLE R	
	VR791	QVPA601-501A	500 TRIMMER RE	
	VR792	QVPA601-501A	500 TRIMMER RE	
		OTHERS		
		EMW10605-002	PRINTED BOARD	
		SBSG3008CC	TAPPING SCREW	
	J481	QMS3501-021	PIN JACK	
	J901	QMS6022-V01	MICROPHONE JACK	
	L011	EQL0011-R45J1	INDUCTOR	
	L701	EQL0001-1R0	INDUCTOR	
	L702	EQL0001-1R0	INDUCTOR	
	S001	QSP6002-E02J2	PUSH SWITCH	
	CN001	EMV7163-012	CONNECT TERMINAL	
	CN108	EWS293-0145	SOCKET WIRE	
	CN109	EWS293-0130	SOCKET WIRE	
	CN118	VMC0075-003	CONNECTOR	
	CN119	VMC0075-003	CONNECTOR	
	CN311	VMC0075-008N	CONNECT TERMINAL	

⚠	No.	Parts Number	Description	Area
	CN401	EMV7123-035	CONNECT TERMINAL	
	CN501	EMV7163-010	CONNECT TERMINAL	
	CN601	EMV7163-014	CONNECT TERMINAL	
	CN602	EMV7163-007	CONNECT TERMINAL	
	CN701	EMV7163-006	CONNECT TERMINAL	
	CN801	EMV7163-007	CONNECT TERMINAL	
	CN812	EMV5129-003	CONNECTOR	
	CN813	VMC0178-003	CONNECT TERMINAL	
	CN814	VMC0178-003	CONNECT TERMINAL	
	EP001	EMZ4002-001Z	EARTH PLATE	
	EP003	EMZ4002-001Z	EARTH PLATE	
	EP004	EMZ4002-001Z	EARTH PLATE	
	EP005	EMZ4002-001Z	EARTH PLATE	
	EP006	EMZ4002-001Z	EARTH PLATE	
	FW901	EWR33D-08SS	FLAT WIRE ASSY	
	FW903	EWR38D-45SS	FLAT WIRE ASSY	
	HS801	E70306-001	HEAT SINK	
	HS803	E70306-001	HEAT SINK	
	HS804	E70306-001	HEAT SINK	
	HS805	E70306-001	HEAT SINK	
	RY011	ESK7D24-213R	RELAY	
	RY901	ESK7D24-213R	RELAY	
	ST011	EMB90TV-601G	SPEAKER TERMINAL	
	ST901	EMB90TV-806A	SPEAKER TERMINAL	
	TP751	QMV5005-004K	PLUG ASSY	

■ Electrical Parts List (ENC-130)

⚠	No.	Parts Number	Description	Area
		I.C.S		
	IC400	MN172412K8C	I.C(MICRO-COMPUTER)	
	IC401	MN171601K8B	I.C(MICRO-COMPUTER)	
	IC402	PST600E-T	I.C(MONO-ANALOG)	
	IC403	SPS-420-1	INFRARED DETECT UNIT	
		DIODES		
	D050	1SS133	SI.DIODE	
	D051	MTZ18JC	ZENER DIODE	
	D052	1SS133	SI.DIODE	
	D053	1SS133	SI.DIODE	
	D061	1SS133	SI.DIODE	
	D062	1SS133	SI.DIODE	
	D292	1SS133	SI.DIODE	
	D400	1SR139-200	SI.DIODE	
	D401	1SR139-200	SI.DIODE	
	D402	1SR139-200	SI.DIODE	
	D405	SLR-54VC50F124	L.E.D.	
	D406	1SS133	SI.DIODE	
	D407	1SS133	SI.DIODE	
	D408	1SS133	SI.DIODE	
	D409	1SS133	SI.DIODE	
	D410	1SS133	SI.DIODE	
	D411	1SS133	SI.DIODE	
	D412	1SS133	SI.DIODE	
	D413	1SS133	SI.DIODE	
	D414	1SS133	SI.DIODE	
	D415	1SS133	SI.DIODE	
	D416	1SS133	SI.DIODE	
	D490	SLR-34VC3F	L.E.D.	
	D855	MTZ12JC	ZENER DIODE	
	D857	MTZ6.2JC	ZENER DIODE	
	D858	1SS133	SI.DIODE	
	D871	1SR139-200	SI.DIODE	
	D872	1SR139-200	SI.DIODE	
	D873	1SR139-200	SI.DIODE	
	D874	1SR139-200	SI.DIODE	
		TRANSISTORS		
	Q051	2SC2240(BL)	SI.TRANSISTOR	
	Q052	2SC2240(BL)	SI.TRANSISTOR	
	Q053	2SA1038(R,S)	SI.TRANSISTOR	
	Q055	2SC2235(O,Y)	SI.TRANSISTOR	
	Q057	2SA965(Y)	SI.TRANSISTOR	
	Q059	2SC1775AV(F1)	SI.TRANSISTOR	
	Q061	2SC2389(S,E)	SI.TRANSISTOR	
	Q062	2SA1038(R,S)	SI.TRANSISTOR	
	Q400	DTC114YS	DIGITAL TRANSISTOR	
	Q401	DTC114TN	DIGITAL TRANSISTOR	
	Q402	DTC144WS	DIGITAL TRANSISTOR	
	Q403	DTC114YS	DIGITAL TRANSISTOR	
	Q404	DTC114YS	DIGITAL TRANSISTOR	
	Q405	DTC144ES	DIGITAL TRANSISTOR	
	Q852	2SC2235(O,Y)	SI.TRANSISTOR	
	Q853	DTC114YS	DIGITAL TRANSISTOR	

⚠	No.	Parts Number	Description	Area
	Q854	2SD1266	SI.TRANSISTOR	
		CAPACITORS		
⚠	C001	QCZ9019-472	4700PF C.CAP.	
	C050	QCHB1EZ-223	0.022MF 25V CER.CAP.	
	C051	QETB1HM-106	10MF 50V E.CAP.	
	C052	QCS21HJ-271A	270PF 50V CER.CAP.	
	C053	QETB1EM-106	10MF 25V AL E.CAP.	
	C054	QCS21HJ-101A	100PF 50V CER.CAP.	
	C055	QCS21HJ-5R0	5PF 50V CER.CAP.	
	C056	QETB1CM-476	47MF 16V AL E.CAP.	
	C057	QCS22HJ-330	33PF 500V CER.CAP.	
	C058	QFLB1HJ-103	0.01MF 50V MYLAR CAP.	
	C059	QETB1HM-476	47MF 50V E.CAP.	
	C060	QCS22HJ-470A	47PF 500V CER.CAP.	
	C061	QETB1HM-225	2.2MF 50V AL E.CAP.	
	C063	QCS22HJ-470A	47PF 500V CER.CAP.	
	C066	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C067	QCY31HK-332Z	3300PF 50V CER.CAP.	
	C068	QCY31HK-332Z	3300PF 50V CER.CAP.	
	C291	QCS31HJ-471Z	470PF 50V CER.CAP.	
	C401	QCZ0202-155	1.5MF 25V CER.RES.	
	C402	QEK61AM-227ZM	220MF 10V AL E.CAP.	
	C403	QEA0HZ-10AZM	AL E.CAP.	
	C404	QETB1HM-106	10MF 50V E.CAP.	
	C405	QETB1HM-475E	4.7MF 50V E.CAP.	
	C406	QETB1HM-475E	4.7MF 50V E.CAP.	
	C407	QETB0JM-107	100MF 6.3V AL E.CAP.	
	C409	QETB1AM-227	220MF 10V E.CAP.	
	C410	QCZ0202-155	1.5MF 25V CER.RES.	
	C412	QEK51HM-225G	2.2MF 50V AL E.CAP.	
	C413	QCHB1EZ-223	0.022MF 25V CER.CAP.	
	C414	QCBB1HK-331Y	330PF 50V CER.CAP.	
	C415	QCZ0202-155	1.5MF 25V CER.RES.	
	C418	QCHB1EZ-223	0.022MF 25V CER.CAP.	
	C419	QCHB1EZ-223	0.022MF 25V CER.CAP.	
	C850	QETB1CM-476	47MF 16V AL E.CAP.	
	C851	QFN82AK-472	4700PF 100V METAL.MYLA	
	C852	QETB1JM-227	220MF 63V AL E.CAP.	
		RESISTORS		
	R051	QRD161J-222	2.2K 1/6W CARBON RE	
	R052	QRD161J-104	100K 1/6W CARBON RE	
	R053	QRD161J-123	12K 1/6W CARBON RE	
	R054	QRD161J-162	1.6K 1/6W CARBON RE	
	R055	QRD161J-104	100K 1/6W CARBON RE	
⚠	R056	QRD14CJ-181S	180 1/4W UNF.CARBON	
⚠	R057	QRD14CJ-332SX	3.3K 1/4W UNF.CARBON	
	R058	QRD167J-332	3.3K 1/6W CARBON RE	
	R059	QRD167J-332	3.3K 1/6W CARBON RE	
	R060	QRD167J-332	3.3K 1/6W CARBON RE	
	R063	QRD14CJ-151SX	150 1/4W UNF.CARBON	
⚠	R064	QRD14CJ-100SX	10 1/4W UNF.CARBON	
⚠	R065	QRD14CJ-561SX	560 1/4W UNF.CARBON	
⚠	R066	QRD14CJ-100SX	10 1/4W UNF.CARBON	

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⚠	No.	Parts Number	Description	Area
	R067	QRD14CJ-151SX	150 1/4W UNF. CARBON	
	R068	QRD161J-391	390 1/6W CARBON RE	
	R069	ERT-D2WHL202S	2K 1/4W NEGATIVE T	
	R070	QRD161J-183	18K 1/6W CARBON RE	
	R071	QRD161J-123	12K 1/6W CARBON RE	
⚠	R072	QRD125J-330	33 1/2W UNF. CARBON	
⚠	R077	QRG022J-562A	5.6K 2W OXIDE META	
	R078	QRD167J-751	750 1/6W CARBON RE	
	R083	QRD161J-102	1K 1/6W CARBON RE	
	R087	QRD14CJ-152SX	1.5K 1/4W UNF. CARBON	
	R088	QRD14CJ-152SX	1.5K 1/4W UNF. CARBON	
⚠	R090	ERF032K-R22	0.22 3W CEM. RES.	
	R095	QRD167J-151	150 1/6W CARBON RE	
	R096	QRD167J-151	150 1/6W CARBON RE	
	R097	QRD167J-151	150 1/6W CARBON RE	
	R098	QRD167J-151	150 1/6W CARBON RE	
	R291	QRD161J-221	220 1/6W CARBON RE	
	R292	QRD161J-221	220 1/6W CARBON RE	
	R293	QRD161J-221	220 1/6W CARBON RE	
	R299	QRD161J-102	1K 1/6W CARBON RE	
	R400	QRD161J-101	100 1/6W CARBON RE	
⚠	R401	QRD14CJ-220S	22 1/4W UNF. CARBON	
	R402	QRD161J-471	470 1/6W CARBON RE	
	R403	QRD161J-471	470 1/6W CARBON RE	
	R404	QRD161J-471	470 1/6W CARBON RE	
	R405	QRD161J-471	470 1/6W CARBON RE	
	R406	QRD161J-471	470 1/6W CARBON RE	
	R407	QRD161J-471	470 1/6W CARBON RE	
	R408	QRD161J-471	470 1/6W CARBON RE	
	R409	QRD161J-471	470 1/6W CARBON RE	
	R410	QRD161J-471	470 1/6W CARBON RE	
	R411	QRD161J-471	470 1/6W CARBON RE	
	R412	QRD161J-471	470 1/6W CARBON RE	
	R413	QRD161J-471	470 1/6W CARBON RE	
	R414	QRD161J-471	470 1/6W CARBON RE	
	R415	QRD161J-471	470 1/6W CARBON RE	
	R416	QRD161J-471	470 1/6W CARBON RE	
	R417	QRD161J-471	470 1/6W CARBON RE	
	R418	QRD161J-471	470 1/6W CARBON RE	
	R419	QRD161J-471	470 1/6W CARBON RE	
	R420	QRD161J-471	470 1/6W CARBON RE	
	R421	QRD161J-471	470 1/6W CARBON RE	
	R422	QRD161J-471	470 1/6W CARBON RE	
	R423	QRD161J-471	470 1/6W CARBON RE	
	R425	QRD161J-471	470 1/6W CARBON RE	
	R426	QRD161J-471	470 1/6W CARBON RE	
	R427	QRD161J-471	470 1/6W CARBON RE	
	R428	QRD161J-471	470 1/6W CARBON RE	
	R429	QRD161J-103	10K 1/6W CARBON RE	
	R430	QRD161J-221	220 1/6W CARBON RE	
	R431	QRD161J-221	220 1/6W CARBON RE	
	R432	QRD161J-471	470 1/6W CARBON RE	
	R433	QRD161J-103	10K 1/6W CARBON RE	

⚠	No.	Parts Number	Description	Area
	R434	QRD161J-103	10K 1/6W CARBON RE	
	R435	QRD161J-103	10K 1/6W CARBON RE	
	R437	QRD167J-223	22K 1/6W CARBON RE	
	R438	QRD161J-471	470 1/6W CARBON RE	
	R439	QRD161J-471	470 1/6W CARBON RE	
	R440	QRD161J-103	10K 1/6W CARBON RE	
	R441	QRD161J-471	470 1/6W CARBON RE	
	R442	QRD161J-471	470 1/6W CARBON RE	
	R444	QRD161J-103	10K 1/6W CARBON RE	
	R445	QRD161J-103	10K 1/6W CARBON RE	
	R446	QRD161J-103	10K 1/6W CARBON RE	
	R449	QRD161J-473	47K 1/6W CARBON RE	
	R452	QRD161J-103	10K 1/6W CARBON RE	
	R453	QRD161J-471	470 1/6W CARBON RE	
	R454	QRD161J-471	470 1/6W CARBON RE	
	R455	QRD161J-103	10K 1/6W CARBON RE	
	R456	QRD161J-104	100K 1/6W CARBON RE	
	R490	QRD161J-221	220 1/6W CARBON RE	
⚠	R861	QRZ0076-3R3	3.3 1/4W FUSIBLE RE	
⚠	R862	QRV144F-1502	15K 1/4W CONST. META	
	R863	QRD161J-821	820 1/6W CARBON RE	
⚠	R864	QRG012J-332A	3.3K 1W OXIDE META	
	R997	QRD161J-103	10K 1/6W CARBON RE	
	R998	QRD161J-103	10K 1/6W CARBON RE	
	R999	QRD161J-103	10K 1/6W CARBON RE	
	RA404	QRB049J-103	10K 1/10WRES.	
	RA405	QRB049J-103	10K 1/10WRES.	
		OTHERS		
		EMW10606-002	PRINTED BOARD	
		E67132-T8R0	FUSE LABEL	
		QWE880-14RR	VINYL WIRE	
		QWE881-13RR	VINYL WIRE	
		QWE882-18RR	VINYL WIRE	
		QWE883-16RR	VINYL WIRE	
		QWE884-18RR	VINYL WIRE	
		QWE886-16RR	PIN WIRE	
		QWE886-20RR	VINYL WIRE	
		QWE888-16RR	VINYL WIRE	
		SBST3008CC	TAPPING SCREW	
	J291	QMS3L10-0A0	MICROPHONE JACK	
	J292	QMS3L10-0A0	MICROPHONE JACK	
	J293	QMS3L10-0A0	MICROPHONE JACK	
	J295	EMN00TV-118A	PIN JACK	
	L051	EQL0011-R45J1	INDUCTOR	
	S400	ESP0001-023M	TACT SWITCH	
	S401	ESP0001-023M	TACT SWITCH	
	S402	ESP0001-023M	TACT SWITCH	
	S403	ESP0001-023M	TACT SWITCH	
	S404	ESP0001-023M	TACT SWITCH	
	S405	ESP0001-023M	TACT SWITCH	
	S406	ESP0001-023M	TACT SWITCH	
	S407	ESP0001-023M	TACT SWITCH	
	S408	ESP0001-023M	TACT SWITCH	

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⚠	No.	Parts Number	Description	Area
	S409	ESP0001-023M	TACT SWITCH	
	S410	ESP0001-023M	TACT SWITCH	
	S411	ESP0001-023M	TACT SWITCH	
	S412	ESP0001-023M	TACT SWITCH	
	S414	ESP0001-023M	TACT SWITCH	
	S415	ESP0001-023M	TACT SWITCH	
	S416	ESP0001-023M	TACT SWITCH	
	S418	ESP0001-023M	TACT SWITCH	
	S490	ESP0001-023M	TACT SWITCH	
	S491	ESP0001-023M	TACT SWITCH	
	S492	ESP0001-023M	TACT SWITCH	
⚠	T002	ETP1000-41ZB	POWER TRASNFORMER	
	X400	ECXP6R0-001ZA	CRYSTAL	
	X401	ECXP6R0-001ZA	CRYSTAL	
⚠	AC001	QMCA002-E02S	AC OUTLET	U
	BK400	E309106-001SM	FL HOLDER	
	CN301	EWS268-A920J	SOCKET WIRE ASSY	
	CN302	EWS293-0118	SOCKET WIRE	
	CN402	EWS269-A210	SOCKET WIRE ASSY	
	CN403	EWS269-A422J	SOCKET WIRE ASSY	
	CN411	VMC0161-R35	CONNECT TERMINAL	
	CN412	EMV5109-009A	PIN PLUG	
	CN711	EMV5163-006R	CONNECT TERMINAL	
	CN804	VMC0177-003	CONNECT TERMINAL	
	DI400	ELU0001-215	FLUORESCENT DISPLAY TUB	
	EP001	EMZ4002-001Z	EARTH PLATE	
	FC001	EMG7331-003Z	FUSE CLIP	
	FC002	EMG7331-003Z	FUSE CLIP	
	FC003	EMG7331-003Z	FUSE CLIP	
	FC004	EMG7331-003Z	FUSE CLIP	
	FC007	EMG7331-003Z	FUSE CLIP	
	FC008	EMG7331-003Z	FUSE CLIP	
	FS001	E3400-444	FELT SPACER	
	FS002	E3400-444	FELT SPACER	
	HS800	E70945-H40B	HEAT SINK	
	JS400	QSJ4003-E01	PUSH SWITCH	
	JS401	QSJ4002-E01	PUSH SWITCH	
	JS490	QSJ4002-E01	PUSH SWITCH	
	RY002	ESK1D12-119J3	RELAY	
	SP400	VYH7653-001	SPRING	
	TA001	EMZ4001-001	TAB	
	TA002	EMZ4001-001	TAB	
	VS001	QSR8001-E01U	ROTARY SWITCH	

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⚠	No.	Parts Number	Description	Area
		I.C.S		
	IC221	NJM2279D	I.C(MONO-ANALOG)	
	IC222	M35012-120SP	I.C(M)	
	IC301	VC4580DD	I.C(MONO-ANALOG)	
	IC305	TC9177P	I.C(DIGI-MOS)	
	IC306	VC4580LD	I.C(MONO-ANALOG)	
	IC307	TC9177P	I.C(DIGI-MOS)	
	IC308	VC4580LD	I.C(MONO-ANALOG)	
	IC311	BA15218N	I.C(MONO-ANALOG)	
	IC321	TC9274N-007	I.C(M)	
	IC331	VC4580LD	I.C(MONO-ANALOG)	
	IC601	LA2785	I.C(M)	
	IC641	LV1011	I.C(M)	
		DIODES		
	D222	1SS133	SI.DIODE	
	D223	1SS133	SI.DIODE	
	D225	MTZ12JC	ZENER DIODE	
	D226	MTZ12JC	ZENER DIODE	
	D251	MTZ6.2JC	ZENER DIODE	
	D252	1SR139-200	SI.DIODE	
	D253	1SR139-200	SI.DIODE	
	D254	MTZ39JCT-77	ZENER DIODE	
	D255	1SR139-200	SI.DIODE	
	D261	1SR139-200	SI.DIODE	
	D262	1SR139-200	SI.DIODE	
⚠	D263	10E2-FD	DIODE	
⚠	D264	10E2-FD	DIODE	
	D265	1SS133	SI.DIODE	
	D880	30D2FC	GE.DIODE	
	D881	30D2FC	GE.DIODE	
	D882	30D2FC	GE.DIODE	
	D883	30D2FC	GE.DIODE	
	D884	30D2FC	GE.DIODE	
	D885	30D2FC	GE.DIODE	
	D886	30D2FC	GE.DIODE	
	D887	30D2FC	GE.DIODE	
	D888	1SS133	SI.DIODE	
		TRANSISTORS		
	Q221	DTC114YS	DIGITAL TRANSISTOR	
	Q251	2SB1357(E,F)	SI.TRANSISTOR	
	Q252	2SC2240(GR,BL)	SI.TRANSISTOR	
	Q253	DTC114YS	DIGITAL TRANSISTOR	
	Q254	DTA144ES	DIGITAL TRANSISTOR	
	Q255	DTC114ES	DIGITAL TRANSISTOR	
	Q301	2SD2144S(VW)	SI.TRANSISTOR	
	Q302	2SD2144S(VW)	SI.TRANSISTOR	
	Q303	DTA144ES	DIGITAL TRANSISTOR	
	Q305	2SD2144S(VW)	SI.TRANSISTOR	
	Q306	2SD2144S(VW)	SI.TRANSISTOR	
		CAPACITORS		
	C221	QETB0JM-477	470MF 6.3V AL E.CAP.	
	C222	QETB1CM-476	47MF 16V AL E.CAP.	
	C223	QCVB1CM-103Y	0.01MF 16V CER.CAP.	

⚠	No.	Parts Number	Description	Area
	C224	QCVB1CM-103Y	0.01MF 16V CER.CAP.	
	C225	QCZ0205-155	1.5MF 25V C.CAP.	
	C226	QETB1HM-105	1MF 50V AL E.CAP.	
	C227	QCS21HJ-100	10PF 50V CER.CAP.	
	C228	QCS21HJ-100	10PF 50V CER.CAP.	
	C229	QCS21HJ-150	15PF 50V CER.CAP.	
	C230	QCS21HJ-270	27PF 50V CER.CAP.	
	C231	QETB1HM-106	10MF 50V E.CAP.	
	C232	QETB1HM-106	10MF 50V E.CAP.	
	C233	QETB1HM-106	10MF 50V E.CAP.	
	C234	QCS21HJ-470	47PF 50V CER.CAP.	
	C235	QCS21HJ-470	47PF 50V CER.CAP.	
	C251	QETB1HM-227	220MF 50V E.CAP.	
	C252	QETB1JM-227	220MF 63V AL E.CAP.	
	C253	QETB1HM-105	1MF 50V AL E.CAP.	
	C254	QETB1HM-226E	22MF 50V E.CAP.	
	C255	QETB1HM-226E	22MF 50V E.CAP.	
	C259	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	
	C260	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	
	C262	QETB1VM-228N	2200MF 35V E.CAP.	
	C264	QFN82AJ-104	0.1MF 100V MYLAR CAP.	
	C265	QFN82AJ-104	0.1MF 100V MYLAR CAP.	
	C266	QETB1HM-225	2.2MF 50V AL E.CAP.	
	C267	QFN82AJ-104	0.1MF 100V MYLAR CAP.	
	C268	QETB1VM-228N	2200MF 35V E.CAP.	
	C300	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C301	QETB1HM-475E	4.7MF 50V E.CAP.	
	C302	QETB1HM-475E	4.7MF 50V E.CAP.	
	C303	QCS21HJ-101A	100PF 50V CER.CAP.	
	C304	QCS21HJ-101A	100PF 50V CER.CAP.	
	C305	QFLB1HJ-182	1800PF 50V MYLAR CAP.	
	C306	QFLB1HJ-182	1800PF 50V MYLAR CAP.	
	C307	QFLB1HJ-682	6800PF 50V MYLAR CAP.	
	C308	QFLB1HJ-682	6800PF 50V MYLAR CAP.	
	C309	QCS21HJ-101A	100PF 50V CER.CAP.	
	C310	QCS21HJ-101A	100PF 50V CER.CAP.	
	C311	QETB1HM-475E	4.7MF 50V E.CAP.	
	C312	QETB1HM-475E	4.7MF 50V E.CAP.	
	C313	QETB1AM-107	100MF 10V AL E.CAP.	
	C314	QETB1AM-107	100MF 10V AL E.CAP.	
	C315	QETB1CM-476	47MF 16V AL E.CAP.	
	C316	QETB1CM-476	47MF 16V AL E.CAP.	
	C319	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C320	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C321	QETB1EM-226N	22MF 25V E.CAP.	
	C322	QETB1EM-226N	22MF 25V E.CAP.	
	C341	QETB1HM-475E	4.7MF 50V E.CAP.	
	C342	QETB1HM-475E	4.7MF 50V E.CAP.	
	C345	QETB1EM-226N	22MF 25V E.CAP.	
	C346	QETB1EM-226N	22MF 25V E.CAP.	
	C347	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C348	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C351	QETB1HM-475E	4.7MF 50V E.CAP.	

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⚠	No.	Parts Number	Description	Area
	C352	QETB1HM-475E	4.7MF 50V E.CAP.	
	C353	QETB1HM-475E	4.7MF 50V E.CAP.	
	C354	QETB1HM-475E	4.7MF 50V E.CAP.	
	C355	QETB0JM-107	100MF 6.3V AL E.CAP.	
	C359	QETB1HM-475E	4.7MF 50V E.CAP.	
	C360	QETB1HM-475E	4.7MF 50V E.CAP.	
	C361	QETB1HM-475E	4.7MF 50V E.CAP.	
	C362	QETB1HM-475E	4.7MF 50V E.CAP.	
	C375	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C376	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C377	QCBB1HK-181Y	180PF 50V CER.CAP.	
	C378	QCBB1HK-181Y	180PF 50V CER.CAP.	
	C379	QFLB1HJ-333	0.033MF 50V MYLAR CAP.	
	C380	QFLB1HJ-333	0.033MF 50V MYLAR CAP.	
	C381	QETB1HM-475E	4.7MF 50V E.CAP.	
	C382	QETB1HM-475E	4.7MF 50V E.CAP.	
	C383	QETB1HM-105	1MF 50V AL E.CAP.	
	C384	QETB1HM-105	1MF 50V AL E.CAP.	
	C385	QETB1EM-106	10MF 25V AL E.CAP.	
	C386	QETB1EM-106	10MF 25V AL E.CAP.	
	C387	QETB1HM-475E	4.7MF 50V E.CAP.	
	C388	QETB1HM-475E	4.7MF 50V E.CAP.	
	C391	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C392	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C395	QCBB1HK-561Y	560PF 50V CER.CAP.	
	C601	QETB1HM-105	1MF 50V AL E.CAP.	
	C602	QETB1HM-105	1MF 50V AL E.CAP.	
	C603	QFLB1HJ-104	0.1MF 50V MYLAR CAP.	
	C604	QFLB1HJ-104	0.1MF 50V MYLAR CAP.	
	C605	QFLB1HJ-104	0.1MF 50V MYLAR CAP.	
	C606	QFLB1HJ-104	0.1MF 50V MYLAR CAP.	
	C607	QETB1HM-474	0.47MF 50V E.CAP.	
	C608	QETB1HM-474	0.47MF 50V E.CAP.	
	C609	QETB1HM-475E	4.7MF 50V E.CAP.	
	C610	QETB1HM-475E	4.7MF 50V E.CAP.	
	C611	QETB1HM-474	0.47MF 50V E.CAP.	
	C612	QETB1HM-474	0.47MF 50V E.CAP.	
	C613	QETB1HM-475E	4.7MF 50V E.CAP.	
	C614	QETB1HM-475E	4.7MF 50V E.CAP.	
	C615	QFV81HJ-154	0.15MF 50V THIN FILM	
	C616	QFV81HJ-154	0.15MF 50V THIN FILM	
	C617	QETB1HM-335	3.3MF 50V AL E.CAP.	
	C618	QETB1HM-335	3.3MF 50V AL E.CAP.	
	C619	QFV81HJ-154	0.15MF 50V THIN FILM	
	C620	QFV81HJ-154	0.15MF 50V THIN FILM	
	C621	QFN81HJ-223	0.022MF 50V METAL.MYLA	
	C622	QFN81HJ-473	0.047MF 50V METAL.MYLA	
	C623	QETB1EM-227	220MF 25V AL E.CAP.	
	C624	QETB1EM-106	10MF 25V AL E.CAP.	
	C625	QETB1EM-106	10MF 25V AL E.CAP.	
	C626	QETB1EM-106	10MF 25V AL E.CAP.	
	C627	QETB1EM-106	10MF 25V AL E.CAP.	
	C628	QETB1EM-227	220MF 25V AL E.CAP.	

⚠	No.	Parts Number	Description	Area
	C631	QETB1EM-476	47MF 25V AL E.CAP.	
	C632	QFV71HJ-474ZM	0.47MF 50V THIN FILM	
	C633	QCS31HJ-681Z	680PF 50V CER.CAP.	
	C634	QETB1EM-227	220MF 25V AL E.CAP.	
	C641	QETB1EM-106	10MF 25V AL E.CAP.	
	C643	QETB1HM-225	2.2MF 50V AL E.CAP.	
	C644	QETB1EM-227	220MF 25V AL E.CAP.	
	C645	QFN81HJ-333	0.033MF 50V MYLAR CAP.	
	C646	QFN81HJ-152	1500PF 50V METAL.MYLA	
	C647	QFN81HJ-333	0.033MF 50V MYLAR CAP.	
	C648	QETB1HM-105	1MF 50V AL E.CAP.	
	C649	QCF21HP-223A	0.022MF 50V CER.CAP.	
	C650	QETB1EM-227	220MF 25V AL E.CAP.	
	C651	QCS21HJ-300	30PF 50V CER.CAP.	
	C652	QCS21HJ-300	30PF 50V CER.CAP.	
	C661	QETB1HM-475E	4.7MF 50V E.CAP.	
	C662	QETB1HM-475E	4.7MF 50V E.CAP.	
	C881	QCE22HP-103A	0.01MF 500V CER.CAP.	
	C882	QCE22HP-103A	0.01MF 500V CER.CAP.	
	C883	QCE22HP-103A	0.01MF 500V CER.CAP.	
	C884	QCE22HP-103A	0.01MF 500V CER.CAP.	
	C885	QCE22HP-103A	0.01MF 500V CER.CAP.	
	C886	QCE22HP-103A	0.01MF 500V CER.CAP.	
		RESISTORS		
	R221	QRD161J-750	75 1/6W CARBON RE	
	R222	QRD161J-750	75 1/6W CARBON RE	
	R223	QRD161J-750	75 1/6W CARBON RE	
	R224	QRD161J-750	75 1/6W CARBON RE	
	R225	QRD167J-332	3.3K 1/6W CARBON RE	
	R226	QRD167J-332	3.3K 1/6W CARBON RE	
	R227	QRD161J-103	10K 1/6W CARBON RE	
	R228	QRD161J-104	100K 1/6W CARBON RE	
	R229	QRD161J-102	1K 1/6W CARBON RE	
	R235	QRD161J-331	330 1/6W CARBON RE	
	R236	QRD161J-331	330 1/6W CARBON RE	
⚠	R251	PTH61G25AR4R7M	POSITIVE T	
	R252	QRD167J-152	1.5K 1/6W CARBON RE	
	R253	QRD167J-223	22K 1/6W CARBON RE	
	R254	QRD161J-104	100K 1/6W CARBON RE	
⚠	R255	QRD14CJ-100SX	10 1/4W UNF.CARBON	
⚠	R262	QRX012J-2R2AF	2.2 1W METAL FILM	
	R263	QRD167J-562	5.6K 1/6W CARBON RE	
	R264	QRD167J-822	8.2K 1/6W CARBON RE	
	R265	QRD161J-103	10K 1/6W CARBON RE	
⚠	R266	QRD14CJ-2R2SX	2.2 1/4W UNF.CARBON	
	R301	QRD161J-222	2.2K 1/6W CARBON RE	
	R302	QRD161J-222	2.2K 1/6W CARBON RE	
	R303	QRD161J-473	47K 1/6W CARBON RE	
	R304	QRD161J-473	47K 1/6W CARBON RE	
	R305	QRD161J-561	560 1/6W CARBON RE	
	R306	QRD161J-561	560 1/6W CARBON RE	
	R307	QRD161J-393	39K 1/6W CARBON RE	
	R308	QRD161J-393	39K 1/6W CARBON RE	

■ Electrical Parts List (ENH-283)

⚠	No.	Parts Number	Description	Area
	R309	QRD161J-474	470K 1/6W CARBON RE	
	R310	QRD161J-474	470K 1/6W CARBON RE	
	R311	QRD161J-104	100K 1/6W CARBON RE	
	R312	QRD161J-104	100K 1/6W CARBON RE	
⚠	R313	QRD14CJ-391SX	390 1/4W UNF. CARBON	
⚠	R314	QRD14CJ-391SX	390 1/4W UNF. CARBON	
⚠	R321	QRZ0077-680	68 1/4W FUSIBLE RE	
⚠	R322	QRZ0077-680	68 1/4W FUSIBLE RE	
	R325	QRD161J-471	470 1/6W CARBON RE	
	R326	QRD161J-471	470 1/6W CARBON RE	
	R327	QRD161J-471	470 1/6W CARBON RE	
	R328	QRD161J-471	470 1/6W CARBON RE	
	R329	QRD161J-471	470 1/6W CARBON RE	
	R330	QRD161J-471	470 1/6W CARBON RE	
	R331	QRD161J-471	470 1/6W CARBON RE	
	R332	QRD161J-471	470 1/6W CARBON RE	
	R333	QRD161J-471	470 1/6W CARBON RE	
	R334	QRD161J-471	470 1/6W CARBON RE	
	R335	QRD161J-471	470 1/6W CARBON RE	
	R336	QRD161J-471	470 1/6W CARBON RE	
	R337	QRD161J-471	470 1/6W CARBON RE	
	R338	QRD161J-471	470 1/6W CARBON RE	
	R341	QRD161J-104	100K 1/6W CARBON RE	
	R342	QRD161J-104	100K 1/6W CARBON RE	
	R343	QRD161J-104	100K 1/6W CARBON RE	
	R344	QRD161J-104	100K 1/6W CARBON RE	
	R347	QRD161J-102	1K 1/6W CARBON RE	
	R348	QRD161J-102	1K 1/6W CARBON RE	
⚠	R349	QRZ0077-680	68 1/4W FUSIBLE RE	
⚠	R350	QRZ0077-680	68 1/4W FUSIBLE RE	
	R351	QRD161J-104	100K 1/6W CARBON RE	
	R352	QRD161J-104	100K 1/6W CARBON RE	
	R353	QRD161J-392	3.9K 1/6W CARBON RE	
	R354	QRD161J-392	3.9K 1/6W CARBON RE	
	R355	QRD161J-103	10K 1/6W CARBON RE	
	R356	QRD161J-103	10K 1/6W CARBON RE	
⚠	R357	QRZ0077-680	68 1/4W FUSIBLE RE	
⚠	R358	QRZ0077-680	68 1/4W FUSIBLE RE	
	R359	QRD161J-104	100K 1/6W CARBON RE	
	R360	QRD161J-104	100K 1/6W CARBON RE	
	R361	QRD161J-104	100K 1/6W CARBON RE	
	R362	QRD161J-104	100K 1/6W CARBON RE	
	R363	QRD161J-563	56K 1/6W CARBON RE	
	R364	QRD161J-563	56K 1/6W CARBON RE	
	R365	QRD161J-105	1M 1/6W CARBON RE	
	R366	QRD161J-105	1M 1/6W CARBON RE	
	R367	QRD161J-563	56K 1/6W CARBON RE	
	R368	QRD161J-563	56K 1/6W CARBON RE	
	R369	QRD161J-105	1M 1/6W CARBON RE	
	R370	QRD161J-105	1M 1/6W CARBON RE	
	R371	QRD161J-103	10K 1/6W CARBON RE	
	R372	QRD161J-103	10K 1/6W CARBON RE	
	R373	QRD167J-562	5.6K 1/6W CARBON RE	

⚠	No.	Parts Number	Description	Area
	R375	QRD161J-102	1K 1/6W CARBON RE	
	R376	QRD167J-562	5.6K 1/6W CARBON RE	
	R377	QRD161J-102	1K 1/6W CARBON RE	
	R378	QRD161J-102	1K 1/6W CARBON RE	
	R379	QRD161J-102	1K 1/6W CARBON RE	
	R380	QRD161J-102	1K 1/6W CARBON RE	
	R381	QRD161J-104	100K 1/6W CARBON RE	
	R382	QRD161J-104	100K 1/6W CARBON RE	
	R387	QRD161J-105	1M 1/6W CARBON RE	
	R388	QRD161J-105	1M 1/6W CARBON RE	
	R389	QRD161J-103	10K 1/6W CARBON RE	
	R390	QRD161J-103	10K 1/6W CARBON RE	
⚠	R391	QRZ0077-680	68 1/4W FUSIBLE RE	
⚠	R392	QRZ0077-680	68 1/4W FUSIBLE RE	
	R641	QRD161J-102	1K 1/6W CARBON RE	
	R642	QRD161J-102	1K 1/6W CARBON RE	
	R643	QRD161J-203	20K 1/6W CARBON RE	
	R644	QRD161J-393	39K 1/6W CARBON RE	
	R651	QRD161J-105	1M 1/6W CARBON RE	
⚠	R653	QRG022J-680AM	68 2W OXIDE META	
	R661	QRD161J-333	33K 1/6W CARBON RE	
	R662	QRD161J-333	33K 1/6W CARBON RE	
	R663	QRD161J-103	10K 1/6W CARBON RE	
	R664	QRD161J-103	10K 1/6W CARBON RE	
	R665	QRD161J-104	100K 1/6W CARBON RE	
	R666	QRD161J-104	100K 1/6W CARBON RE	
⚠	R881	QRX012J-R22A	0.22 1W METAL FILM	
⚠	R882	QRX012J-R22A	0.22 1W METAL FILM	
		OTHERS		
		EMW10607-002	PRINTED BOARD	
	J221	EMN00TV-116A	PIN JACK	
	J222	EMN01TV-102A	PIN JACK	
	J223	EMN00YV-217A	PIN JACK	
	J301	EMN00TV-422AJ2	PIN JACK	
	J302	EMN00TV-622AJ2	PIN JACK	
	J303	EMN00TV-622AJ2	PIN JACK	
	L221	EQL4007-220	INDUCTOR	
	X221	ECX0177-3447EWT	CRYSTAL	
	X641	ECXP8R0-001Z	CRYSTAL	
	CN305	EWS293-0113	SOCKET WIRE ASSY	
	CN312	VMC0075-003	CONNECTOR	
	CN315	VMC0075-003	CONNECTOR	
	CN413	EMV5109-009A	PIN PLUG	
	CN511	EMV5163-010R	CONNECT TERMINAL	
	CN611	EMV5163-014R	CONNECT TERMINAL	
	CN612	EMV5163-007R	CONNECT TERMINAL	
	CN802	EWS273-005	SOCKET WIRE ASSY	
	CN803	VMC0177-003	CONNECT TERMINAL	
	CN805	EMV7163-007	CONNECT TERMINAL	
	CN811	EMV5163-007R	CONNECT TERMINAL	
	CN815	EMV5163-007R	CONNECT TERMINAL	
	EP250	EMZ4002-001Z	EARTH PLATE	
	FC881	EMG7331-003Z	FUSE CLIP	

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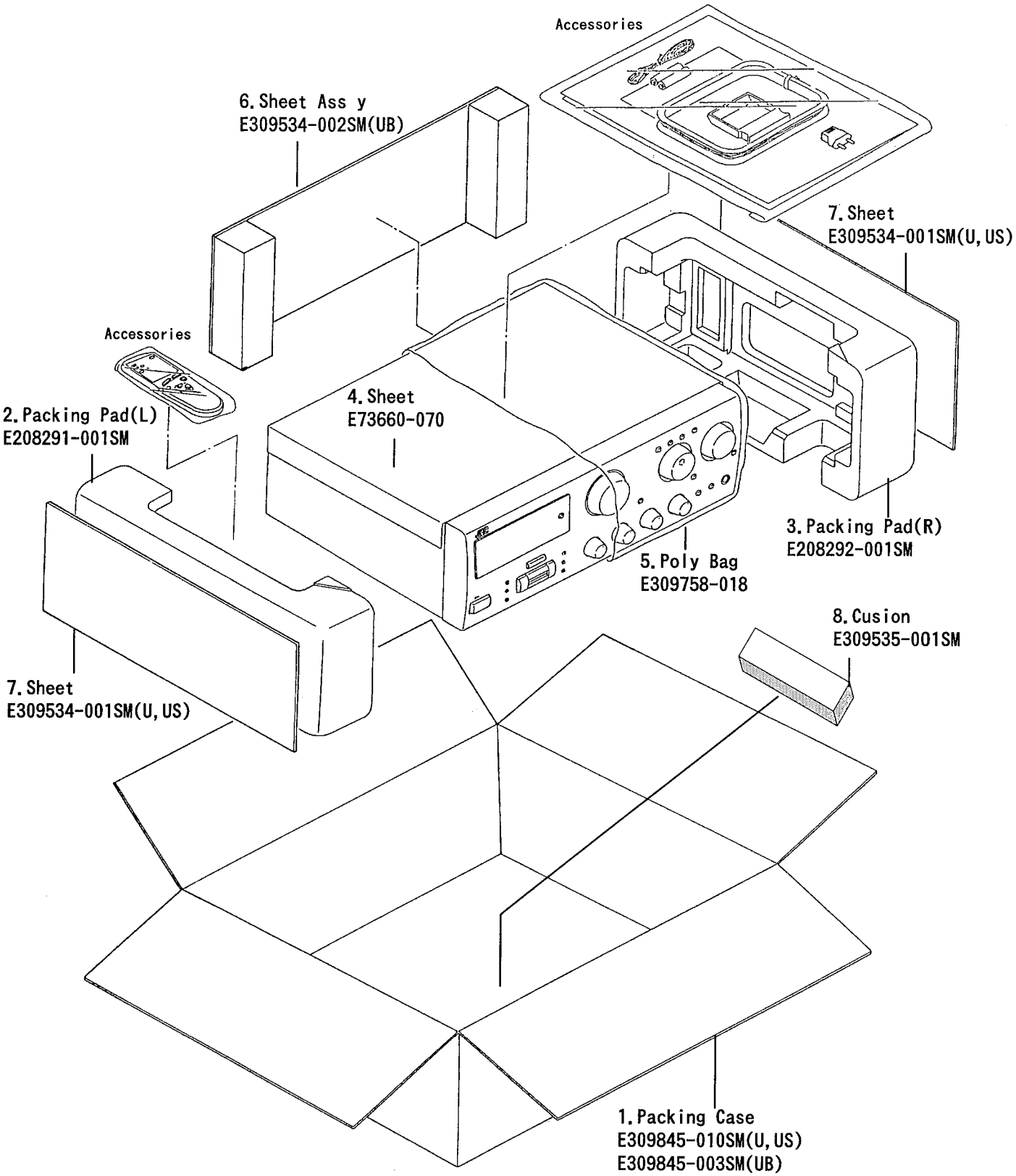
⚠	No.	Parts Number	Description	Area
	FC882	EMG7331-003Z	FUSE CLIP	
	FC883	EMG7331-003Z	FUSE CLIP	
	FC884	EMG7331-003Z	FUSE CLIP	
	FS225	E3400-431	FELT SPACER	
	FW211	EWR37D-13SS	CORD	
	LA851	E67132-T2R0	FUSE LABEL	
	LA852	E67132-T2R0	FUSE LABEL	
	RY880	ESK1D12-119J3	RELAY	
	RY881	ESK1D12-119J3	RELAY	

■ Accessories List

⚠	No.	Parts Number	Parts Name	Q'ty	Description	Area
	1	E30580-2413A	INSTRUCTION BOOK	1		
	2	RM-SR718U	WIRE-LESS REMOTE CONTROL	1		
	3	R6PRPA-2STSA	DRY CELL	1		
	4	EQB4001-015	LOOP ANTENNA	1		
	5	EWP201-011	ANTENNA WIRE	1		
	6	E309758-001	POLY BAG	1		
⚠	-	ENZ2202-001	SIEMENS PLUG	1		US
⚠	-	ENZ2203-001	ADAPTOR PLUG	1		U

Packing Materals and Parts List



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(No.20581)

Printed in Jap
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